

European Cultural Offshoots in the New World: Differences in Their Mental Hospitalization Patterns

Part II: German, Dutch, and Scandinavian Influences

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Summary. The mental hospitalization rates for Canadians of German, Dutch, and Scandinavian origin are significantly below the rates for Canadians generally and even for Canadians of British origin, although the latter are the more advantaged in the society. The better-than-average picture proves to derive from the males much more than from the females, which weighs against a genetic explanation, and it is unlikely to be due to differences in use of psychiatric services. Examination of rates for subcategories of the population, and a review of the literature on these and other Canadian sub-cultures, suggests that the mental health advantages experienced by these males may be due in part to family structure and in part to religious influences.

Key words: International comparison – Transcultural psychiatry – Epidemiology – Vergleichende Psychiatrie.

Introduction

In 1904, Emil Kraepelin complained that *“Wir sind durchaus im unklaren darüber, ob und in welchen Punkten sich die psychische Morbidität der Franzosen, Engländer, Italiener von der unsrigen unterscheidet.”* Three quarters of a century later, even though one might think that nothing could be easier than comparing representative samples of patients in neighboring countries and calculating comparative rates of entry into treatment, the same complaint can legitimately be made. We do not even know with confidence whether the rate for psychosis in one of these countries is higher than that in another, although recent surveys have yielded the surprising finding that psychoses are seen three times more often in German general practices (Dilling, Weyerer and Enders, 1978) than in British (Shepherd et al., 1966) or Norwegian ones (Brekke and Øgar, 1977). The reasons for this ignorance are multiple and not the concern of this paper, but one of

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them is undoubtedly the fact that psychiatric textbooks convey the impression that the psychoses are the same throughout the world, with nationality having nothing to do with either incidence or basic symptomatology, even though it has apparently very much to do with another facet of mental disorder, namely suicide.

The recently-reported findings from the World Health Organization's two-year follow-up of schizophrenic patients in nine countries has cast strong doubts on the latter assumption, since patients with apparently very similar intake pictures exhibited significantly better average outcomes when they derived from some countries than when they derived from others (W.H.O., 1979). However, these differences could theoretically have derived from irregularities in case selection, despite the effort expended to assure similarity, and the question of differences in incidence is only beginning to be tackled by that body. One reason for this is that each country tends to follow different rules regarding which type of patient gets referred to which type of treatment (or not referred at all), so that a simple comparison of official statistics would not necessarily be valid; and when field surveys are done, as in Sweden and Denmark, it is difficult to ensure that the diagnostic criteria are being applied in similar fashion in the various countries.

Better methods of international comparison will eventually be achieved. In the meantime, however, it may be useful to examine what there is to learn from existing data, some of which avoid one of the problems just mentioned, i.e., the problem of comparing rates deriving from different medical systems. All European countries have sent their people overseas, and in countries of resettlement there are people of many European origins all being served by the same medical services, the same hospitals, the same doctors. Naturally, they may not feel equally cared for by these common services, since those already speaking the dominant language of the new country will tend to get better service—and hence probably make fuller use of that service—than those not speaking it. Also, the individuals who go overseas are not a random sample of the people of their country of origin, and the stresses of the migration have to be allowed for. However, it has been shown in Australia that suicide rates (the mental health measures least dependent on the structure of the medical services) for 16 national-origin groups parallel very closely the rates for their countries of origin, the rank-order correlations being 0.94 for males and 0.75 for females after standardization for age (Whitlock, 1975). In this respect at least, therefore, the overseas migrants do quite closely reflect the relative mental health of their homelands. Also, in Canada it was for a long time customary to record, both at population censuses and at admission to hospital, not just a person's birthplace but his national origin, i.e., the country from which his ancestors on the male side came when they settled in Canada. As a result, it has been possible there to get mental hospitalization data not just on immigrants, who might not speak the local language and who had undergone the stresses of resettlement, but on their descendants, virtually all of whom know the local languages and had shared the local schooling, etc. Naturally, these descendants are going to carry fewer of the traits from their European background than first-generation immigrants do, but insofar as their mental hospitalization patterns show any difference at all from the pattern exhibited by Canadians in general, this is likely to derive from that national

origin. Data from many New World countries, but particularly from Canada, thus seem capable of casting light on the subject Kraepelin was complaining about.

This paper will compare mental hospitalization rates for Canadians of German, Dutch, and Scandinavian origin for the year 1961 with those for Canadians in general, allowance being made for geographic distribution and some other variables. The year 1961 was the last occasion when both a population census and a central mental hospitalization register existed which recorded national origin in the sense mentioned above. Although the data are old, they have the advantage of deriving from a time when the mental hospital was virtually the only source of care for the psychotic, community clinics not really having started, and when the national criteria for sending someone to a mental hospital were much more uniform than today. In a previous paper (Murphy, 1978), similar comparisons were made between Canadians in general and groups of French, Italian, and British origin.

Method

All reports on first admissions to Canadian mental hospitals in the year 1961 which had been received by the Dominion Bureau of Statistics were screened for completeness, consistency and absence of duplication, the totals also being compared with the numbers of first admissions reported by each hospital on other forms. From these were then excluded *all* cases from the small number of hospitals whose reports were unsatisfactory (too much information missing), as well as from those which had not supplied individual reports at all, something which occurred in the Province of Quebec; and the catchment populations for these were noted for subtraction from the Canadian total. At the same time, all the relevant tables from the 1961 Census of Population were obtained, including some on cultural origin specially commissioned for this study. Since the ratio of beds to population varied from one province to another, and since there were also sometimes differences in policy (e.g., on whether alcoholism should be treated in mental hospital or in special institutions) ratios of provincial to national first admission rates for 24 combinations of age group and diagnosis were calculated and the distribution of each 'origin' group across the different provinces was also calculated, for later standardization.

For each 'origin' group separately, rates were then calculated for combinations of sex, age (4 groups), diagnosis (8 categories), duration in hospital (3 categories) and one or more of the following: education (4 categories), nativity or immigrant status (2 categories), marital status (4 categories), occupation (11 classes, males only) and religion. Not all these combinations could be derived for all the districts from which the psychiatric data had been judged satisfactory, since some census tables were available only for complete provinces; but if a reduction were made it was effected equally for the numerators (cases) and denominators (population). When the initial rates were obtained, they were then adjusted to allow for the provincial distribution of the 'origin' group in question (e.g., German-origin), age-standardized where appropriate, and converted into Standardized Morbidity Ratios (SMRs) by comparison with the rate for all Canadians in the same demographic category, significance of the difference between the rate for the 'origin' group and that for all Canadians in the same category being calculated through the formula $S.E. (diff.) = \sqrt{(p_1 \times q_1)/n_1 + (p_2 \times q_2)/n_2}$.

Because members of the Jewish-Canadian sub-culture sometimes indicated this when asked about 'origin' and sometimes only when asked about religious affiliation, and are not necessarily consistent in this respect, all individuals answering 'Jewish' to either question either at the Census or on hospital admission were put into a single category separate from the categories of national origin. Therefore, persons born or having ancestors born in Germany, Holland, or Scandinavia but of Jewish faith or claiming Jewish origin are not included in the sub-cultures being discussed here.

Results

Tables 1 and 2 present the basic findings for the German-origin, Dutch-origin, and Scandinavian-origin sections of the Canadian population, respectively, as compared with Canadians in general. If the rate for a section of one of these origin groups, e.g., German-origin males aged 15–24, is exactly the same as for all Canadians in the same category (i.e., all males aged 15–24), after allowing for geographic distribution, then the SMR will be 100. If the relevant rate is lower than that for the corresponding stratum of the total Canadian population then the SMR will be less than 100, and an asterisk will have been added if the difference is statistically significant; while an SMR greater than 100 means that this section of the 'origin' group has a rate which is higher (significantly so, if accompanied by an asterisk) than that for all Canadians in the same stratum.

Section A of Table 1 shows that males in all three of the 'origin' groups have rates significantly below those for Canadians generally, this difference being significant at all age levels for the German-origin, at three of the four age levels for the Dutch-origin, and only as an overall average for the Scandinavian origin. On the female side the overall rates are also below average, but not to a statistically significant degree. Proceeding down the same table, it can be seen that the better-than-average rates for the German-origin males stem mainly from those

Table 1. Standardized morbidity ratios respecting first admissions to mental hospital by Canadians of German, Dutch and Scandinavian origin; by sex, age, education, nativity, and marital status

		German-origin		Dutch-origin		Scandinavian-origin	
		M	F	M	F	M	F
A. Age groups	15–24	74*	83	31*	66	111	84
	25–44	66*	103	59*	105	81	90
	45–64	64*	117	61*	98	77	82
	65+	74*	79	113	71	105	121
	Total incl. "no age recorded"	63*	91	58*	85	83*	86
B. Marital status	Single	63*	100	74*	97	74*	104
	Currently married	69*	95	70*	88	77*	74*
C. Education (7 provinces only)	Elementary	73	96	46*	67*	51*	114
	High school	62*	116	57*	102	74*	71*
	Coll. and Univ.	68	92	59	78	119	190*
D. Nativity	Canadian-born	71*	113*	50*	72*	47*	87
	Foreign-born	81	85	85	102	84	57*

Standardization is for provincial distribution and, except for specified age groups, for age structure.

SMR = $\frac{\text{Rate for subculture in indicated row category} \times 100}{\text{Rate for all Canadians in same row category}}$ SMRs are not provided for the widowed and divorced, because age standardization for their small numbers is not practicable and their age distributions are very irregular

* Significance beyond the 0.05 level

Table 2. Psychiatric SMRs for Canadian residents of German, Dutch and Scandinavian origin, by diagnosis and duration in hospital (data sources as in Table 1)

	German-origin		Dutch-origin		Scandinavian-origin	
	M	F	M	F	M	F
A. Diagnostic group						
Schizophrenia	82	82	62*	90	56*	75
Manic-depressive psychosis	35*	129*	85	126	105	81
Depressive neurosis	74	104	42*	93	58*	104
Other neurosis	74*	128*	75	140*	100	60
Senile and organic psychoses	72*	79	84	46*	122	129
Alcoholic disorders	36*	13*	42*	50	98	75
Other admissions	72*	67*	44*	46*	69*	82
B. Duration of first mental						
Hospitalization 0–6 months	60*	101	58*	94	80*	91
7–18 months	70*	71*	52*	99	107	71
over 18 months	59*	66*	41*	58*	49*	71

Standardization of SMRs to allow for the provincial distribution of each 'origin' group was effected separately for each diagnostic category within four age ranges, and standardization for age was then performed

who have had a high school but not a university education, while for the Dutch-origin the educational level does not appear to matter and for the Scandinavian origin it is the least educated that show the best picture when compared with other Canadians in the same educational category. In all male groups, the picture is better-than-average regardless of whether we are dealing with the single or married, and with persons born in Canada or with immigrants, although the SMRs are only significant for the Canadian-born. On the female side the matter is more complex, German-origin women of Canadian birth having significantly higher rates than other Canadian-born women, on average, although the reverse is true for Canadian-born women of Dutch origin and for female immigrants from Scandinavia. In Table 2 one sees that the below-average male rates for the German-origin and the Dutch-origin derive from all diagnostic categories, whereas for the female groups and the Scandinavian-origin men the picture is more complicated.

First impressions from these findings are that the males from these national origins enjoy superior mental health while their females do not. Second thoughts recommend caution, however, since the Canadian average rates against which comparison has been made might be distorted by an extremely high level of pathology in some small minorities such as the Canadian Indians or East European refugees. Alternatively, the origin groups under study might be unusually prone to keep their mentally disturbed males at home; or they might disproportionately belong to the higher social strata where rates are normally low; or they might for some reason be disguising their national origin when they go

into mental hospital. Such possibilities need examination before we can take the data at their face value.

The first possibility that can be ruled out is that the rates we are considering only seem low because some other Canadian minority has very high rates. The dominant national groups in Canada are of British and French origin, and the previous paper (Murphy, 1978) showed that these had SMRs close to or above the average of 100. Therefore, Canadians of German, Dutch and Scandinavian origin are requiring less mental hospital care than these two groups, despite the latter's dominant position. A second possibility that can almost as surely be excluded is that the SMRs are low because the sub-cultures which we are considering here have a greater reluctance than other Canadian sub-cultures to send their males to mental hospital. Where that occurs in other societies, one almost always finds that the cases which do reach hospital are of more than average severity and hence need a longer-than-average duration of care. If that had occurred in the present instance, one would have expected to see in Table 2 that the SMRs for cases requiring less than 6 months hospitalization were substantially below 100, as is the case, but that the SMRs for cases requiring longer stay were substantially above 100, which is not true. Rather, it is particularly with respect to chronic cases that the three groups here make a good impression, not just on the male side but on the female also. Moreover, lest it be thought that cases are being hidden which never reach hospital at all, Table 3 represents data from a survey which I carried out in Canadian rural communities of dissimilar origins (Murphy and Lemieux, 1967) and which indicate the German-origin communities to have hospitalized a higher percentage of their schizophrenics than the other groups studied, and also to have one of the lowest prevalence rates for this disease.

The third factor which could result in a false impression is socioeconomic status since if the sub-cultures being considered here were above average in this respect, one would expect them to have better-than-average hospitalization rates regardless of their national origin. Since socioeconomic status is usually linked to education, and since the SMRs are low in all educational classes, this explanation is improbable, but a more informative approach to the same question can be affected through comparing rates for specific occupational groups, as is done in Fig. 1. There one sees that the three sub-cultures maintain rates below the Canadian averages at almost all points. Finally, while it must be admitted that some persons of German origin might have concealed that origin during either of the two world wars when Canada was fighting against their country of origin, it has to be recognized that if they named a different origin at the hospital they would be likely to do the same at the population census; and in any case the Dutch-origin had no such reason to conceal their origin, and they have SMRs which are still lower.

The predominant result from this study, therefore, is that Canadian males of German, Dutch and Scandinavian origin do genuinely have rates of treated (and probably of untreated—see Table 3) psychosis that are substantially below the average not just of Canadians in general but of the British-origin majority, although the latter have circumstances in their favor. Other points to be inferred from the tables are of less importance but invite brief mention. Regarding *age* distribution, one sees that the SMRs for the Dutch-origin males are lowest in the

Table 3. Proportions of never-hospitalized to total active cases of schizophrenia traced during a field survey of Canadian rural communities of British, French, German and Polish origin, with active prevalence rates per 1,000 aged 15+ (Murphy and Lemieux, 1967)

Origin		Population aged 15+	Active prevalence	%age never hospitalized
British	Protestant	5,080	4.2	19%
British	Catholic	3,080	7.1	27%
French	Long-settled	2,940	10.5	29%
French	Shorter-settled	3,100	7.1	27%
German		2,580	5.8	7%
Polish		1,660	7.2	17%

Case-finding included both local survey and search of hospital records

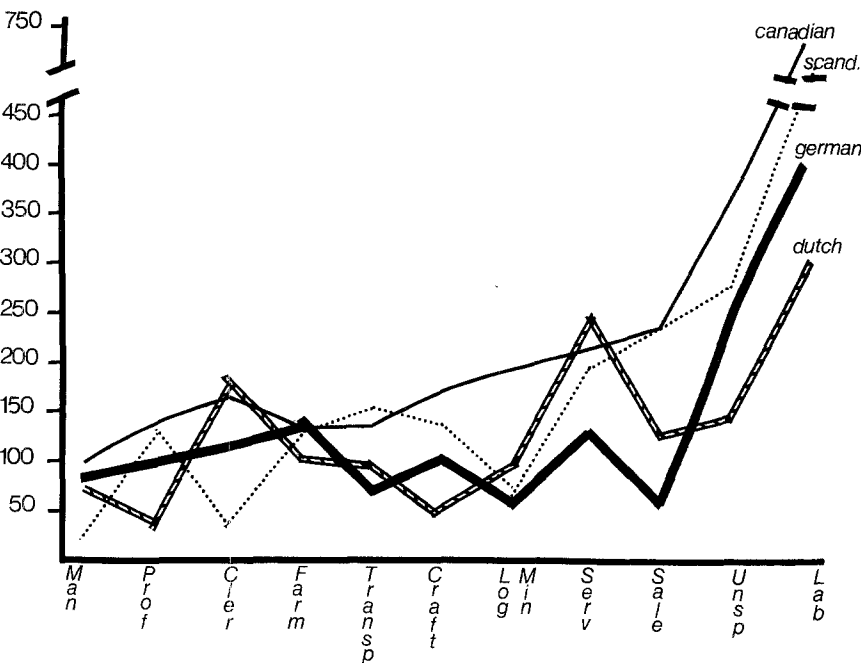


Fig. 1. Rates of mental hospitalization for German-, Dutch- and Scandinavian-origin males in eleven occupational categories, age standardised, as compared with rates for Canadian males in general. The eleven occupational categories are: Managerial, Professional, Clerical, Farming, Transportation, Crafts, Logging and Mining, Service Sales, Unspecified, and Laborer

earliest age group (indicating that they have the greatest advantage over other Canadians at that point) and increase with age, something which does not occur in the other two sub-cultures. Regarding *schooling*, both the Dutch- and the Scandinavian-origin seem better advantaged by their cultural background when they have had little education than when they have more, compared with other Canadians in the same educational categories, although it is possible that for those born outside of Canada these categories are not really equal. Respecting diagnosis, the pattern shown by the Scandinavian-origin is closer to that found in the British-origin Protestants (Murphy, 1978) than to those shown by the other two groups being discussed here, the SMRs of the former being lowest for schizophrenia and highest for the senile and organic psychoses, whereas among the German- and Dutch-origin males the lowest SMRs are for the alcoholic and (combined) affective disorders. On the female side, the German- and Dutch-origin SMRs are high for manic depressive psychosis and for 'other' neurosis, both requiring relatively brief stay in hospital if one judges from part B of Table 2. Finally, an additional point to be noted from Fig. 1 is the absence of any real, inverse correlation between occupational status and hospitalization rate in the German-origin until one gets to the least skilled categories, something which contrasts with British and North American findings in general and would therefore seem worth looking into in Germany itself.

Socio-Cultural Influences

Although the combined results just reported would at one time have been thought as reflecting a racial influence, or at least some process whereby persons with superior mental health had been collected into the three 'origin' groups under study, current genetic theory relating to mental disorder does not lead one to expect sex differences of the type found here, certainly not across-the-board. Socio-cultural factors thus probably contribute more to these differences than racial or genetic ones do, and it is particularly factors which benefit men more than women that would seem pertinent, although ones which also benefit the men under study more than other Canadian men. We can start a search for these by asking in which demographic or diagnostic categories the male SMRs are lowest.

Table 1 shows that, across-the-board, there is no particular demographic category that has male SMRs much lower than the others, but that the immigrants' SMRs are definitely higher than those for the Canadian-born, so that it is a factor relating the European background to the Canadian setting which we should be looking for rather than one deriving from that background or the migration alone. Table 2 shows that male SMRs are particularly low for the depressive neuroses and, in two of the three groups, for alcoholic disorders. From the actual rates themselves, not shown here, it becomes apparent that it is in the affective psychoses and neuroses that the males have the greatest advantage over the females. Regarding the affective disorders, and the depressive neuroses in particular, it is generally agreed that loss of needed emotional support is an important precipitating factor, although it must be remembered that ability to withstand such loss can depend on upbringing. Regarding the alcoholic disorders, i.e., alcoholism and alcoholic psychoses, an obvious preventive factor is the discouragement or prohibition of the drug's use. It therefore seems logical to enquire

whether the Canadian sub-cultures under study are known to possess life-styles or attitudes which would reduce loss of emotional support or discourage alcohol consumption.

Virtually the only 'hard' data which one can obtain indicating levels of emotional support in different sections of a total population are (a) percentages living in one-person households and (b) divorce rate. The first of these indices is not cross-tabulated by 'origin' in Canadian censuses but the second is, although unfortunately with divorced and widowed being placed in the same category. Taking only persons aged 15–64, i.e., before widowhood becomes common, it turns out that the German- and Dutch-origin have the lowest percentages of persons in these categories, of all 'origin' groups. In other words, they probably have the lowest rate of divorce despite the fact that they are predominantly Protestant and hence have easier access to divorce than groups that are predominantly Roman Catholic. This supports the impression that emotional support may be maintained with greater consistency in these sub-cultures than among Canadians in general, but does not say why. Regarding the prohibition or discouragement of alcohol use, there is in Canada no such cultural tradition, but some of the Protestant sects (in Max Weber's sense of this term) do disapprove of or even forbid it, and it is generally true that communal support is greater in such sects than in the population at large. Therefore it is appropriate to ask whether the Dutch-, German- and Scandinavian-origin are more frequently members of such sects than other Canadians are.

The first rows in Table 4 show that this is the case, and rows C and D confirm that the sects have lower hospitalization rates for alcoholic disorders than the churches. However, the three sub-cultures under study have lower rates for these disorders than the Other Canadians regardless of religious affiliation, and whereas the Other Canadians have average mental hospitalization rates which are just as high in the Protestant sects as in the churches, our three sub-cultures have much better male rates when they belong to a sect than when they belong to a church, regardless of whether the alcoholic disorders are included or not. Furthermore, it is clear that within each broad religious category the males of the three sub-cultures have better rates than the equivalent females. The most striking point in this table, however, is that while the hospitalization rates for the males of the three sub-cultures are roughly 75% those of Other Canadians affiliated to churches, that figure drops to 44% when we turn to the sect members (row H), something which is not due to the rate for the sectarian Other Canadians being higher than average, is not due to the alcoholic disorders, and is not paralleled on the female side. Therefore, although the males of these three sub-cultures seem mentally healthier than other Canadians overall, there also appears to be a combination of cultural origin and religious (sect) affiliation which is particularly beneficial or at least particularly protecting against mental hospitalizations.

There are three main ways in which sect membership might affect mental hospitalization rates, i.e., by impeding recourse to psychiatry; by religious and communal support; and through the maintenance of certain family traditions. Regarding the first of these, the Mennonites were pioneering community mental health centers in the U.S. Middle West before the idea was more widely known; the Hutterites welcomed a psychiatric investigation in the 1950s; and my own

Table 4. Relationship of rates for Canadians of German, Dutch and Scandinavian origin to rates Canadians of other origins; by sex and broad religious affiliation

	Religious affiliation					
	Roman catholicism		Other churches		Protestant sects	
Population Distribution						
A. German,Dutch and Scandinavian origins	16%		62%		22%	
B. Other Canadians	29%		65%		6%	
Admission rates (1) <i>Alcoholic disorders</i>						
M	M		M		M	
C. German,Dutch and Scandinavian origins	28		23		12	
D. Other Canadians	63		34		35	
E. Ratio C/D	0.44		0.68		0.34	
(2) <i>Other disorders</i>						
M	F	M	F	M	F	
F. German,Dutch and Scandinavian origins	155	213	129	161	92	134
G. Other Canadians	186	237	182	173	210	180
H. Ratio F/G	0.83	0.90	0.71	0.93	0.44	0.
(3) <i>Total disorders</i>						
M	F	M	F	M	F	
I. German,Dutch and Scandinavian origins	183	218	152	165	104	135
J. Other Canadians	249	245	216	183	245	182
K. Ratio I/J	0.64	0.89	0.70	0.90	0.42	0.

Groups included in "Protestant Sects" here are: Jehovah's Witnesses; Hutterites and Mennonites; Mormons; Pentecostals; various Baptist and Anabaptist groups; and some smaller denominations separately classified. Persons not attending any church are included in the "Other Churches", since census-takers are instructed to encourage respondents to name a religion even if they do not attend religious service, and hospitals likewise tend to assign a religious affiliation for administrative convenience.

experience of less radical sects among the German-origin suggests that psychiatric aid was also comfortably accepted by them. Certainly, none of these groups were likely to leave their members for long in a mental hospital if they thought the treatment was having no effect, but in contrast to the traditionally-minded French-Canadian villagers at that time (Murphy and Lemieux, 1967) they did seek for psychiatric aid if they thought it could help, and since they were mainly living in the prairies and not in the cities, such aid was in practice only to be obtained through hospitalization.

Regarding communal support, it is convenient if over-simplified to divide the relevant sects into two categories—those which subordinated family life to a type of commune, and those which stressed traditional family structure. Communal support for the individual was undoubtedly stronger in the former category than in other types of sect, and in these communalistic groups the German- and Dutch-origin undoubtedly predominated. However, when rates are calculated for the most communalistic, i.e. Hutterite and Mennonite, as distinct from other sects, one finds that the combined hospitalization rate for the affective disorders is very slightly above the Canadian average and not below as might be expected.

Also, although the field mental health survey of the Hutterites found an unusually low frequency of schizophrenia and general neurosis (Eaton and Weil, 1955), relatively many cases of one type of depression were found, apparently linked to the strong self-criticism which the sect teaches. Therefore, it does not seem to be mainly by reason of communalistic support that the sectarian males of our three sub-cultures have such low hospitalization rates either.

That leaves religious support and the maintenance of certain family structures as the factors most likely to be behind the low rates in sect members from our three sub-cultures. There is no reason to think that these sub-cultures were being given more support than others within the same sects, but there is reason to think that their family structure might be different. Within the Calvinist and Anabaptist sects, German-Canadians have been described as having an unusually authoritarian family structure (Gerwin, 1938; Korella, 1952), and even in the late 1960s it was observed regarding Dutch-Canadian families of Calvinist affiliation that "the ultimate authority of the father is indisputable"; "if a challenge arises and friction results, it is clear that the woman is expected to give in"; and "the mother's role remains one of dispensing love, understanding, sympathy and affection" (Ishwaran, 1977, pp. 108, 109, 112). These characteristics are very similar to what had been described from Germany, Holland and Scandinavia earlier in this century (Métraux and Hoyte, 1953; Ishwaran, 1959), and their persistence after the second World War in Canada at a time when they had almost disappeared in Europe merely illustrates the general rule that traditional family models and ideals tend to be maintained in overseas colonies, particularly among exclusive minorities such as religious sects, after they have disappeared in the homelands.

Why such a family structure should be associated with better-than-average mental health is less easy to understand, but not too difficult either. The authoritarian pose of the traditional German father has been condemned as harmful (Erikson, 1942), and in some respects it may have been. However, in the cultures we are discussing, each spouse accorded the other full authority and respect in their separate spheres, there was very little overlap of roles, and paternal autocracy tended to be exercised as a responsibility quite as much as a right, in contrast to what is recorded of some other European traditions, for instance the Polish and southern Italian, so that they did not give rise to as much inter-generational conflict as the latter did. Certainly it is easy to see that the married male is provided considerable protection against certain types of stress and can also bolster his self-image in such a family setting, and a comparison of German-American and Polish-American schizophrenics suggests that the unmarried male may also benefit from living in such a family (Piedmont, 1962). Moreover, in his description of the German-Canadian sect members, Korella (1952) refers to the family forming a "common front against what was believed to be a hostile environment" and reminds us that membership of a sect often protects individuals against the stresses associated with low socio-economic status, success in this world being less important than moral propriety.

The protection which the woman gets from such a family and religious setting can also be considerable as long as she either accepts the male domination which Ishwaran describes in the Canadian-Dutch, or has achieved some other freely-desired relationship; but if she has taken part in modern ideas of wider self-

expression for women and is restricted by her husband or her community from pursuing these she is likely to suffer from internal conflicts that could be conducive to mental disorder. For the population under discussion the evidence for this is clearest, because it has been most studied, in the Hutterites and Mennonites. In 1950, the Hutterite women, although with more mental disorder than their men, had a prevalence rate considerably below that of North American women generally (Eaton and Weil, 1955). Furthermore, they used very few psychotropic drugs, and psychological testing indicated that they had strongly nurturant inclinations which sublimated any feeling of aggressiveness (Kaplan and Plaut, 1956, p. 43). In the 1960s, an enquiry into child-rearing and ideal roles among them revealed that while they were still accepting their traditional family roles and disapproving of movements to give women greater rights, they also thought their husbands inconsiderate, they desired more sharing and equality, and they feared harming their babies, something which seems a clear indication that they were partly rejecting the maternal role at an unconscious level and that the sublimation of aggression was fading (Schluderman and Schluderman, 1971). Furthermore, a small enquiry of my own in the early 1970s indicated that they had now quite a high consumption of psychotropic drugs and many psychomatic symptoms.

I know of no evidence that a new accommodation has yet been achieved for the Hutterite women, but among the Mennonites, who went through such phases earlier and have a wider range of gradations from traditional to modern, there is evidence of a new and healthier equilibrium (Kurokawa, 1969; Sawatsky, 1964); and in the Dutch-Canadian settlements studied by Ishwaran (1977) the same seems to be true. Therefore, it is to be expected, as was found, that the females' mental health is poorer than that of the males in people with such backgrounds, but that there are still benefits when compared with Canadian women whose lives lack this structural support.

Conclusions

One purpose of this paper was to explore how far groups of different European national backgrounds exhibit different frequencies and patterns of treated mental disorder when served by a fairly uniform system of medical and psychiatric care. The other purpose was to explore how far any psychiatric differences seemed explainable by reference to specific cultural and social characteristics. It has been shown that the three groups studied—Canadians of German, Dutch and Scandinavian origin—do exhibit certain significant differences in mental hospitalization patterns, both when compared with each other and when compared with Canadians in general. In the search for possible explanations, attention has been focused on what appeared to be the most striking feature in the data, namely that the males of these groups had significantly lower rates of mental hospitalization than Canadians as a whole and than the two most dominant—and hence most privileged—sub-cultures in Canada, the British and the French; whereas the females of the three groups did

not exhibit the same advantage. This focus ignores the differences between the three groups and ignores also certain characteristics which both sexes in all three groups have in common and which distinguish them from other Canadians of both sexes, such as the low frequency of patients needing more than 18 months hospitalization at first admission; but that was necessary for reasons of space.

It seems highly unlikely that the features distinguishing the three groups studied here are attributable to differences in recourse to psychiatric services or to some incidental factor unrelated to mental health, since the main demographic variables known to affect mental hospitalization rates have all been explored and/or allowed for, and since the findings from my own field survey (Table 3 above) and from the well-known survey of Hutterite communities harmonize with what the present data show. The possibility that the migration from Germany, Holland and Scandinavia selected the more mentally healthy cannot be absolutely ruled out, but there is no evidence pointing in that direction and the well-known study of Norwegian migrants to the USA by Ødegaard (1932) came to just the opposite conclusion. Therefore, it is reasonable to suspect that the national cultures from which these groups stemmed may have provided traits which protect the mental health of their members, either under the special conditions existing in Canada or more generally.

What these traits might be can only be speculated, since we normally have no means of measuring them. However, we can examine the literature on Canadian sub-cultural minorities to enquire into those features which have struck researchers as distinguishing our three groups from other Canadians, and we can also analyze the hospitalization rates in the hope of identifying subcategories in which the distinguishing psychiatric pattern is most marked. The literature on Canadian sub-cultures is uneven, and one cannot be sure how far the description of a particular community is valid for others of the same 'origin', particularly when 'origin' conceals as much variation as the term Scandinavian does. Nevertheless, one feature which has struck writers on all three groups is the relatively rigid role division within the family and the respect accorded to each member within an assigned role. This is something which one meets in descriptions of German, Dutch and some Scandinavian societies from the earlier part of this century, and which contrasts with, for instance, the arbitrary power and family conflicts described in rural Polish families of that era (Thomas and Znaniecki, 1958). The examination of hospitalization rates for various subcategories supports the idea that this family structure may be pertinent, since it is among members of Protestant sects that the male rate for our three sub-cultures is lowest, and it is known that it is in these sects that male authority tends to be most strongly maintained, either within the family or within the sectarian commune.

What was to be found in the three sub-cultures in Canada in 1961 is not necessarily relevant to the homeland populations of these sub-cultures in the 1980s or even, perhaps, in 1961 itself, since migrating populations are never fully representative of the population from which they depart and certain traditions can be maintained longer in resettled minorities than in the homeland. Nevertheless, the high correlations cited earlier between the suicide rates of homeland and emigrant groups suggest that the mental health of the latter can reflect that of the homeland. If so, the present findings could have some relevance for Europe.

References

- Brekke, T. H., Øgar, B.: *Patienter i norsk almenpraksis*. Tidsskr. Norsk Laegeforen. **97**, 491—503 (1977)
- Dilling, H., Weyerer, S., Enders, I.: *Patienten mit psychischen Störungen in der Allgemeinpraxis und ihre psychiatrische Überweisungsbedürftigkeit*. In: *Psychiatrische Epidemiologie*, H. Häfner (ed.). Berlin, Heidelberg, New York: Springer 1978
- Eaton, J. W., Weil, R. J.: *Culture and mental disorders*. Glencoe: Free Press 1955
- Erikson, E. H.: Hitler's imagery and German youth. *Psychiatry* **5**, 475—493 (1942)
- Gerwin, E. B.: *A survey of the German-speaking population of Alberta*. M. A. Thesis, University of Alberta, 1938
- Ishwaran, K.: *Family life in the Netherlands*. The Hague: van Keulen 1959
- Ishwaran, K.: *Family, kinship and community; a study of Dutch Canadians*. Toronto: McGraw Hill 1977
- Kaplan, B., Plaut, T. F. A.: *Personality in a communal society*. Lawrence: University of Kansas Press 1956
- Korella, K.: *Personality adjustments of German Baptists of Alberta*. M. A. Thesis, University of Alberta, 1952
- Kraepelin, E.: Vergleichende Psychiatrie. *Centralbl. Nervenhe. Psychiat.* **27**, 433—437 (1904)
- Kurokawa, M.: Acculturation and mental health of Mennonite children. *Child Develop.* **40**, 689—705 (1969)
- Métraux, R., Hoyte, N. S.: *German national character; a study of German self-images*. (Studies in Contemporary Cultures. B.). New York: American Museum of Natural History (Limited Distribution) 1953
- Murphy, H. B. M.: European cultural offshoots in the new world: Differences in their mental hospitalization patterns. Part I: British, French and Italian influences. *Soc. Psychiat.* **13**, 1—9 (1978)
- Murphy, H. B. M., Lemieux, M.: Quelques considérations sur le taux élevé de schizophrénie dans un type de communauté canadienne-française. *Can. Psychiat. Assoc. J.* **12**, (Numéro Spécial) S72—S81 (1967)
- Ødegaard, Ø.: *Emigration and insanity*. Copenhagen: Levin and Munksgaard 1932
- Piedmont, E. B.: *An investigation of ethnic grouping differences in the development of schizophrenia*. Ph. D. Thesis, University of Buffalo, 1962
- Sawatsky, A.: *The Mennonites of Alberta and their assimilation*. M. A. Thesis, University of Alberta, 1964
- Schludermann, S., Schludermann, E.: Maternal child-rearing attitudes in Hutterite communal society. *J. Psychol.* **79**, 169—177 (1971)
- Shepherd, M., Cooper, B., Brown, A. C., Kalton, G.: *Psychiatric illness in general practice*. London: Oxford University Press 1966
- Thomas, W. I., Znaniecki, F.: *The Polish peasant in Europe and America*. New York: Dover 1958
- Whitlock, F. A.: *Suicide, culture and society*. In: *Cultures in collision*, I. Pilowsky (ed.). Adelaide: Australian National Association for Mental Health 1975
- World Health Organization: *Schizophrenia: An international follow-up study*. New York: Wiley 1979

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