Suicide in Western Australia

W.Clifford
assisted by
J.Marjoram

Australian Institute of Criminology

Suicide in Western Australia

by
W.Clifford
assisted by
J.Marjoram

Australian Institute of Criminology · Canberra 1979

Published and printed by the Australian Institute of Criminology, 10-18 Colbee Court, Phillip, A.C.T. Australia, 2606.

The J.V. Barry Memorial Library has catalogued this work as follows:

CLIFFORD, William 364.152209941

Suicide in Western Australia, by W. Clifford assisted by J. Marjoram. Canberra, Australian Institute of Criminology, 1979.

[3], 84, [1]p., tables. 30cm.

Bibliography:p [85]

1. Suicide - Western Australia. I. Marjoram, Jeff. II. Australian Institute of Criminology. III. Title.

ISBN 0 642 91010 3

Corrigendum

This report contains an error in pagination. Page 64 follows directly from page 62.

This study of suicide in Western Australia is part of a wider investigation of suicide in Australia generally - and of the international problem of self-destruction. It was conducted with the cooperation of the Australian Bureau of Statistics and with the very generous assistance of the officers of the Crown Law Department of Western Australia, particularly the Under Secretary for Law, Mr R. Christie, who is that State's representative on the Australian Criminology Research Council and a member of the Board of Management of the Australian Institute of Criminology.

In this study only the actual deaths recorded as suicide are included. Attempted suicides are not considered. Whilst there is an obvious link between suicides and attempted suicides, it is also clear that not all attempts are genuine efforts to take life. However, in the case studies provided here, the number of persons who took their lives and who are also known to have previously attempted to do so unsuccessfully are fully discussed.

CONTENTS

	Page
Orientation	1
Western Australian Suicides in National and International Perspective.	6
Suicide, Homicide, Road Deaths and Alcohol Consumption.	15
Suicide and Social Integration in Western Australia.	20
The Cases for 1978.	25
Sex, Age, Method and Marital Status	26
Place of Residence and Place of Occurrence	32
Choice of Method	34
Previous Attempts	41
Reasons for Suicide	43
Comparison with Previous Research.	60
Discussion.	73

LIST OF TABLES

		Page
Table 1	Leading Causes of Death by Sex and Age, Australia, 1970-1975.	6
Table 2	Average Annual Suicide Rates for Selected Countries, 1970-1975.	9
Table 3	Average Annual Suicide Rates by State 1963-1977.	11
Table 4	Average Annual Number of Suicides, Average Annual Suicide Rates and Average Proportion of Total Suicides by State, 1963-1977.	12
Table 5	Suicide Rates by Age - Australian States, 1976.	14
Table 6	Suicide, Road Death and Homicide Rates and Ratios, Western Australia, 1963-1977.	17
Table 7	Suicide Rates and the Integration of Labour Force Status with Sex - Selected Countries, Circa. 1950.	22
Table 8	Suicides by Age, Sex and Marital Status, Western Australia, 1978.	30
Table 9	Suicides by Age, Sex and Method Employed, Western Australia, 1978.	31
Table 10	Percentage Distribution of Suicides by Age, Sex and Marital Status, Western Australia, 1967 and 1978,	65
Table 11	Percentage Distribution of Suicides by Sex, Place of Residence and Method Employed, Western Australia, 1967 and 1978.	68

ORIENTATION

Those who already know Australia and more particularly Western Australia, need not be detained by this chapter. But since suicide is acknowledged to be culturally conditioned, it is necessary to introduce Western Australia as a setting for the figures and for the cases of self-destruction which are covered by this study.

Western Australia extends from the western coast of the continent to the 129° east line of longitude, where it joins South Australia and the Northern Territory. With its 2,525,500 square kilometres, it is the largest state of the Australian federation. When Australia was known to the world as New Holland, there had been a number of landings on the western coast and in the early 19th century, having established the Colony of New South Wales in the east, England was apprehensive that the French might have designs on the west. On instructions from London, therefore, Governor Darling of New South Wales sent Major Lockyer with 24 convicts and a party of soldiers to hoist the British flag. This was done in 1826 at the place where Albany, Western Australia now stands. Further exploration of the Swan River and glowing accounts of its prospects reaching London led to Captain Charles Fremantle being dispatched from England in H.M.S. Challenger to claim New Holland for the British in 1829.

Hard on the heels of Fremantle was the barque Parmelia almost overflowing with 150 men, women and children - and all their belongings. They landed on 31 May 1829 on Garden Island to found the Swan River Colony. However they had been travelling since February and had had their adventures so that there were less than 100 of them - guarded by 57 soldiers who had sailed in H.M.S. Sulphur. Thereafter private investors in England formed companies for the settlement of the Swan River and for the next ten years there were hopeful shiploads sailing to obtain their land grants and to realise the promise of a new land. Unlike New South Wales, there were no convicts amongst these early settlers who looked forward to colonisation by free labour.

Expectations were too high. Many of the first settlers were ill prepared for the rigours of life in the new colony. Some did not have the trade or farming skills needed - and prosperity did not flow as rapidly as had been expected. One colony of two ships - the Gilmore and the Rockingham which had brought a plethora of equipment was decimated when a storm capsized the Rockingham and deprived those who had already landed from the Gilmore of the labour and materials they needed. This particular settlement died out.

As the disappointments fed back to the homeland, the numbers of emigrants declined and investors withdrew. Those already settled in the new country needed both capital and labour for the improvement of their condition: and as both dried up, their situation deteriorated - making it less likely that lives or money would be committed to the settlement. Reluctantly, therefore, the new settlers agreed to accept the transportation of convicts to obtain the labour required. This decision was made towards the end of the 1840s and the first convicts were landed on 1 June 1850.

The convict labour from 1850 until transportation was discontinued in 1868, plus free passages for female immigrants, gave the economy the boost it required. Nearly 10,000 convicts arrived and over 5,000 women on free passages, so that by 1869 Western Australia had a population of 22,915. To this day there are marks of the convicts' labour in a variety of infrastructural projects then undertaken. Roads were cut and buildings erected to develop the colony: and it was noticeable how the economic growth and population increase tended to slow down after 1869. A large part of the growth in the number of people settled in Western Australia from 1869 to 1884 (33,000 approx) was due more to the natural increase in the settled population than it was to new migration. Thereafter the development of sheep farming, the steady improvement in farm produce and the discovery of minerals,

plus some vigorous encouragement of immigration, has firmly established Western Australia as a land of achievement and promise, which is celebrating its 150th anniversary of foundation as this is written.

According to the Australian Bureau of Statistics (Western Australian Office) in 1975 there were 1,137,384 people living in Western Australia, i.e. about 9 per cent of the total population of Australia. Of these people, about 60 per cent were born in Western Australia, 12 per cent were born in other States of Australia and 15 per cent were born in Great Britain. Also the number of migrants from Asia, the Mediterranean and other countries is increasing. According to the 1971 census, there were then 21,903 Western Australians listed as being of Aboriginal origin. 17,510 persons from nearly 50 different countries arrived in Western Australia in 1974, stating that they intended to settle there. In 1975 this had fallen to less than 8,000. However, as in other States of Australia, the population of Western Australia is urbanised. Not only do the urban dwellers account for 82 per cent of the total population, but no less than 62 per cent are to be found in Perth, the State capital.

Yet, Western Australia, for all its urbanisation depends very largely for its livelihood on primary products - wheat, barley, oats, fruit, vegetables, cotton, timber, fishing, sheep farming, cattle raising, iron ore, bauxite, nickel, crude oil, gold and coal. There are industries associated with the processing of minerals and about 3,000 manufacturing firms employ nearly 70,000 people. Western Australia contributes in value about 12 per cent of Australia's total primary production.

The post second world war years have been years of progress for Western Australia. Its population has grown, its production increased. It has been hit more recently by inflation and unemployment - the stagflation which has struck not only Australia but the Western world. The number of

persons admitted to unemployment benefit rose from 12,718 in 1970-71 to 69,285 in 1974-75 and the number of unemployed persons rose from 8,461 in 1973 to 17,003 in 1975.

It is against this background that the suicide rate per 100,000 of the population has fluctuated from 12.0 per 100,000 in 1887 through 14.1 per 100,000 in 1896[1] to 16.1 in 1963 - falling back to 11.2 in 1977. In 1975 for some reason unexplained, it fell to 7.5 per 100,000 - the lowest ever as far as records go. But the following year it was back to the level of 10 per 100,000. The average annual suicide rate for Western Australia in the period 1963 to 1977 was 17.3 per 100,000 for men and 7.5 per 100,000 for women. In Western Australia, as elsewhere in Australia, the male rate exceeds the female rate of suicide and this generally holds true for all age groups. In Western Australia the male suicide rate peaks at the 45 - 54 age group - and the female rate peaks in the 55 - 64 age group.

It was possible to trace two previous studies of suicide in Western Australia - both by Dr. P.W. Burvill of the Department of Psychiatry at the University of Western Australia.[2] The first was published in 1970 and dealt with age sex variations in the State's suicides between 1901 and 1967. He was able to show that male suicide rates in Western Australia rose during times of economic recession and fell during World War 11 (but not during World War 1). The female rate did not fall during World War 11. He points out that in contrast female rates in Britain fell alongside the male rates in both World Wars. Burvills' study of sex and age showed a steep rise in Western Australia suicides after the age of 60 - especially amongst males, thus confirming Stengel's[3] proposition that the majority of people who kill themselves are

---

(1) Western Australian Year Book 1976 p.246

(2) P.W. Burvill : "Age-Sex Variations in Suicide in Western Australia 1901-1967 : Medical Journal of Australia : December 12, 1970 : pp 1113-1116

(3) E. Stengel "Suicide and Attempted Suicide 1964 : Penguin Books

elderly and many are physically ill. He shows that during 1958-67 about a third of all Western Australian suicides were under 40 (both sexes) and a further third fell in the 40-59 age group.

Contrary to world figures Burvill found that from 1901 to 1952 suicides in the country districts exceeded those in the town and an analysis of the 1910-1912 period alongside the 1932-34 period showed this to be specific for sex. However, the formal Perth metropolis was compared with "country" : such a dichotomy necessarily including in "country" a number of cases which are distinguished in the present study as "suburban".(4)

Dr. Burvill's second study analysed the 1967 coroners records for the 114 suicides that year. He found support for Durkheim's contention that allowing for age the divorced and separated have the highest suicide rates, the single and widowed the next highest and the married the lowest rates. He noted an absence of female suicides among the single, separated and divorced in the areas outside Perth and he felt that the idea of the highest suicide risk being elderly males living alone needed some modification in Western Australia. Burvill noted that physical illness had contributed to the act of self destruction in 29 per cent of all cases and in 47 per cent of the cases of those over 60 years of age: but he was concerned about the high number of suicides who had had previous treatment for mental disorder.(5)

---

(4) Op. Cit. p. 1114

(5) P.W. Burvill "Suicide in Western Australia 1967 : An analysis of Coroners Records : Australia and New Zealand Journal of Psychiatry (1971) 5 : 37-44.

WESTERN AUSTRALIAN SUICIDES IN NATIONAL AND INTERNATIONAL PERSPECTIVE

Suicide is third or fourth in the leading causes of death in Australia among certain age groups. As such it is a major health problem. The actual figures according to age groups for the years 1970 to 1975 are provided by the Australian Bureau of Statistics as follows:-

TABLE 1

AUSTRALIA

Leading Causes of Death by Sex and Age 1970-1975

	Males						Females					
Causes of Death 15-24 Years	1970	1971	1972	1973	1974	1975	1970	1971	1972	1973	1974	1975
Motor Vehicle Accidents	96	96	88	97	98	95	24	26	23	23	23	21
All Other Accidents	22	23	23	22	20	20	3	5	3	4	4	4
Suicide	12	16	14	15	16	14	5	6	6	6	5	4
Cancer	9	10	9	9	9	9	6	9	6	6	5	7
Causes of Death 25-34 Years												
Motor Vehicle Accidents	45	52	40	44	42	42	12	12	10	9	11	10
Cancer	18	15	16	17	15	17	16	15	17	15	12	14
Suicide	20	21	19	16	17	20	8	13	9	6	8	8
All Other Accidents	25	22	23	21	25	22	2	4	4	3	3	3
Causes of Death 35-44 Years												
Cancer	47	45	46	44	43	43	59	53	52	51	52	53
Ischaemic Heart disease	67	68	70	69	63	62	16	19	16	16	19	18
Motor Vehicle Accidents	38	35	28	34	30	38	12	10	10	10	10	10
Suicide	26	26	27	26	23		12	15	16	12	13	

(For other age groups suicide was not amongst the four leading causes of death between 1970 and 1975)

In Western Australia in 1975 suicide ranked fifth in the principal causes of death amongst the 15-19 years old - being preceded by (1) malignant neoplasms, (2) congenital anomalies, (3) accidents poisonings, violence and (4) motor vehicle accidents. Then suicide moved up to fourth place amongst the 20-24 year olds the order being as for the earlier age group but without any high place for "congenital anomolies". As a cause of death amongst the 25-34 year olds, suicide falls to sixth place preceded now not only by the causes already shown but also by diseases of the circulatory system and "congenital anomolies" which regains a high position. Still falling in relative importance suicide ranks only seventh amongst the causes of the deaths of the 35-54 year olds-and after the age of 54 suicide has lost its place in the principal causes of death in Western Australia in 1975.

In Australia since 1964 suicides have accounted for 1.4 per cent of all deaths. In 1965 and 1967, 1.7 per cent of all deaths were due to suicide. In West Australia in 1975 there were 7,372 recorded deaths, i.e. 4,701 males and 3,271 females. The suicides and self inflicted injuries causing death numbered 66 males and 19 females, i.e. 1.15 per cent of all deaths, 1.4 of all male deaths and 0.5 of all female deaths.

During the twentieth century the rate of suicide in Australia has been fairly consistently established at about 12 per 100,000 of the population. It is a figure which fluctuates however. Thus in 1955 it was 10.3 per 100,000 and in 1965 it was 14.9 per 100,000. It varies according to time and place and, as shown, Western Australia in 1963 had a rate well above the national rate. At the time of writing it approximates to the national figures of 12 or so per 100,000.

This 12 per 100,000 places Australia suicide rate as being much lower than corresponding rates for Austria, Denmark,

Hungary, Czechoslovakia, Finland, West Germany, Sweden, Sri Lanka and Switzerland, for example, but higher than the rates in many countries including Italy, Netherlands, Spain, New Zealand, England/Wales, Scotland, Israel, and Norway. Countries with recent suicide rates similar to those for Australia include Canada, Bulgaria, USA, Poland, Hong Kong, and Luxemburg. Table 2 gives average annual suicide rates for a wide selection of countries during the six year period 1970-1975. Rates were obtained from relevant United Nations and World Health Organisation publications and include all countries for which data was available for at least three years within this period. It can be seen that Australia's average annual suicide rate was ranked in the fifteenth position among the fifty-three (53) countries for which data was available.

TABLE 2

AVERAGE ANNUAL SUICIDE RATES* SELECTED COUNTRIES

1970 - 1975

Country	Suicide Rate	Rank	Country	Suicide Rate	Rank
Hungary	37.3	1	Netherlands	8.6	27
Czechoslovakia	24.1+	2	Portugal	8.4	28
Denmark	24.0	3	Trinidad/Tobago	8.1#	29
Austria	23.3	4	Scotland	8.0	30
Finland	23.1	5	England/Wales	7.9#	31
Federal Republic of Germany	20.8#	6	'Venezuela	5.9#	32
Sweden	20.5	7	Israel	5.7#	33.5
Sri Lanka	20.2	8	Italy	5.7#	33.5
Switzerland	19.7	9	Chile	5.3#	35
Japan	16.2	10	Mauritius	4.4	36
France	15.6#	11.5	'Thailand	.43+	37
Belgium	15.6	11.5	Spain	4.2#	38
'Cuba	14.4+	13	Northern Ireland	3.7	39
Luxembourg	13.4	14	Guatemala	3.4*	40
Australia	12.2	15	West Malaysia	3.3+	41.5
Canada	12.1#	16.5	Costa Rica	3.3	41.5
Bulgaria	12.1	16.5	Greece	3.1	43
United States of America	11.9	18	Ireland	3.0#	44
Poland	11.6	19	'Ecuador	2.7#	45.5
Hong Kong	11.4	20	'Panama	2.7#	45.5
Uruguay	10.7#	21	Dominican Republic	2.6#	47
Singapore	10.5	22	'Paraguay	2.2*	48
Iceland	10.1	23	'Peru	2.1*	49
Norway	9.1	24.5	Mexico	1.1#	50
Puerto Rico	9.1	24.5	'Philippines	0.9#	51
New Zealand	8.9#	26	Malta	0.6+	52
			Jordan	0.1#	53

Notes :

* Rate per 100,000 population
' Countries with data of "unknown reliability"
* Data available for three years only.
\+ Data available for four years only.
\# Data available for five years only.

Source : United Nations Demographic Yearbook U.N. New York 1970-1976
W.H.O. World Health Statistics Annual, W.H.O. Geneva 1970-1976

As already indicated, between 1963 and 1977 Western Australia's rate of suicide per 100,000 of the population has fallen from 16.1 (1963) to 11.2 (1977) : in 1975 it actually fell to a low 7.5 per 100,000. The position of Western Australia vis a vis other States of Australia is given by the Australian Bureau of Statistics as follows

TABLE 3

ANNUAL SUICIDE RATES* BY STATE 1963 - 1977

STATE	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
New South Wales	17.9	15.4	17.5	16.0	16.9	13.6	13.1	12.8	13.5	13.8	12.6	12.3	11.9	11.3	10.8
Victoria	11.9	10.4	10.9	10.9	13.4	11.1	9.9	10.8	14.3	12.2	9.7	10.4	10.0	8.9	11.9
Queensland	18.3	20.0	18.3	17.0	16.6	14.0	14.7	15.1	15.3	12.3	13.0	13.9	14.4	12.2	11.6
South Australia	15.0	16.0	12.7	12.4	13.0	11.4	12.2	11.8	10.4	10.7	10.1	11.0	12.0	11.6	10.1
Western Australia	16.1	15.1	13.4	15.0	13.8	12.9	11.3	11.2	14.8	12.3	11.8	10.9	7.5	10.8	11.2
Tasmania	10.5	11.5	11.7	8.9	12.7	14.1	13.1	12.7	12.3	10.9	13.9	12.9	9.8	11.3	10.2
Northern Territory	18.6	5.8	14.8	5.3	10.1	12.4	4.4	13.9	4.6	9.8	14.6	8.8	10.2	11.3	10.2
Australian Capital Territory	16.4	7.4	10.2	11.3	7.7	6.2	11.4	9.0	6.2	5.1	9.5	7.8	8.8	11.8	10.0

* Rate per 100,000 mean population.

Source : Australian Bureau of Statistics
Causes of Death : ABS Canberra, 1964-1976
Unpublished tabulations, Canberra, 1978.

It will be seen that Queensland has had the highest rate of suicide per 100,000 (though generally declining) whilst the Australian Capital Territory or the Northern Territory has had the lowest rates with however, some sharp changes throughout the years. In 1972 Victoria ranked fourth but a year later it was in seventh place. In 1968 the Northern Territory was fifth in rate order but in 1969 it enjoyed the lowest suicide rate in the country.

Western Australia between 1963 and 1977 ranked fifth amongst Australian States in the average annual number of suicides, third in the average annual suicide rate and fifth in the average proportion of total suicides.

TABLE 4

State	Average Annual Number of Suicides 1963-1977	Average Annual Suicide Rate 1963-1977	Average Proportion of Total Suicides 1963-1977
New South Wales	625	14.0	38.9
Victoria	381	11.1	23.8
Queensland	272	15.1	17.0
South Australia	138	12.0	8.6
Western Australia	121	12.5	7.5
Tasmania	46	11.8	2.8
Northern Territory	8	10.4	0.5
Australian Capital Territory	12	9.3	0.7
Australia	1,604	12.9	100.0

Source : Australian Bureau of Statistics : Causes of Death 1964-1976 and unpublished tabulations : Canberra, 1978.

The highest age-specific suicide rates were for the 45-54 age groups in New South Wales (23.7), South Australia (19.6), Western Australia (24.0), Tasmania (30.4) and the Australian Capital Territory (32.4). Both in Victoria and Queensland the highest age-specific rates were for those 55-64 years (16.7 and 23.5 respectively), whilst in the Northern Territory the highest suicide rate in 1976 was in the 35-44 year age group (51.9). Here however a degree of caution is necessary in interpreting the rates because of the small numbers of suicides in the less populated states. Full details are provided in Table 5.

TABLE 5

Suicide Rates* by Age, Australian States, 1976

STATE	AGE (Years)						
	<15	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65+
New South Wales	0.2	9.0	15.1	17.1	23.7	14.6	17.8
Victoria	0.1	7.9	11.2	14.4	13.4	16.7	16.3
Queensland	0.2	13.2	14.3	20.4	21.4	23.5	17.2
South Australia	0.0	11.3	18.3	14.7	19.6	16.8	17.7
Western Australia	0.0	9.7	15.3	17.2	24.0	23.0	18.7
Tasmania	0.9	12.6	10.3	11.4	30.4	16.9	0.0
Northern Territory	0.0	33.6	4.8	51.9	39.1	22.5	0.0
Australian Capital Territory	0.0	13.7	10.1	20.4	32.4	0.0	16.2

* Rate per 100,000 population as at census June 1976

Source : Australian Bureau of Statistics. Unpublished Tabulations.

SUICIDE, HOMICIDE, ROAD DEATHS AND ALCOHOL CONSUMPTION

How do Western Australia's suicides compare with the rate of homicide and the figures for death on the road, and to what extent is this correlated with the consumption of alcohol? Dr. E. Cunningham Dax in a 1968 study of Australian suicide observed:

> "A rough estimate of the aggressive tendencies of any community can be made by totalling up the homicides, suicides and deaths by road accidents in proportion to total population. Probably if alcoholism were considered in relation to these factors it would give even more meaning to the findings."(6)

Whitlock has more recently said:

> "Of the measures of violence in society one might wish to consider homicide rate, accident rates, violent crime rates and, particularly in the past 40 years road crash death rates."(7)

and he himself has produced suggestive data.

In view of the above opinions, and Henry and Short's(8) well known suggestion that homicide should be considered along with suicide because both represent forms of aggression, it was decided to see whether there were any connections between such phenomena in Western Australia.

Rates per 100,000 population for suicides, road deaths and homicides in Australia during the period 1963-1977 are given in Table 6, this data being derived from cause of death reports of the Australian Bureau of Statistics. As noted previously, Western Australia's suicide rate during this period varied between 16.1 (1963) and 7.5 (1975); with the average annual rate being 12.5. In comparison, the road death rate per 100,000 population varied between 35.7 (1970) and 24.2 (1977) while that for homicides fell within the range of 2.1 (1976) and 0.6 (1967).

---

(6) E. Cummingham Dax "Suicide in Todays Society" : The Medical Journal of Australia : 1968 : 2 : p1197-1200.

(7) F.A. Whitlock "Suicide, Culture and Society" in Pilowski 1 (ed) "Cultures in Collision" Australian National Association for Mental Health : Adelaide : 1975 : pp 384-387.

(8) Henry, A.F. and Short, J.F. Suicide and Homicide. Glencoe, Ill. Free Press, 1954.

Data on road deaths and suicides for each state during the decade 1968-1977 has been analyzed. During this ten year period the average annual suicide rate for Western Australia was 11.5 per 100,000 population, compared to a rate of 12.5 for the fifteen year period 1963-1977. While the suicide rate for the latter period was third highest among all states, that for the ten year period 1968-1977 was fourth highest. The average annual road death for Western Australia (30.7 per 100,000 population) during 1968-1977 was the second highest among all states. These average annual rates for all states during 1968-1977 are as follows:

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.
Suicide Rate	29.2	26.5	30.2	26.0	30.7	28.9	54.4	17.5
Road Death Rate	12.6	10.9	13.6	11.1	11.5	12.1	10.0	8.6

From Table 6 it can also be seen that the ratio between the numbers of suicides and road deaths is of the order 1 : 1.6 to 1 : 3.6, the average ratio for the period being 1 : 2.5. In other words, the annual number of road deaths in Western Australia during 1963-1977 was, on average, two and a half times the number of suicides.

With reference to suicides and homicides in Western Austrlaia, Table 6 shows that the ratio between the two during 1963-1976 varied from 1 : 0.04 to 1 : 0.25, the average being 1 : 0.11 - the number of suicides in Western Australia was on average, about ten times that for homicide.

Unfortunately, annual statistics of alcohol consumption and expenditure for each state are not available, and thus this parameter was excluded from inclusion in Table 6. A small amount of such data for one or two years has been assembled by the Department of Health (c.f. Alcohol in Australia - A Summary of Related Statistics, Canberra, 1978) and is considered below.

TABLE 6

SUICIDE, ROAD DEATH AND HOMICIDE RATES AND RATIOS, WESTERN AUSTRALIA

1963-1977

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Suicides per 100,000 Population	16.1	15.1	13.4	15.0	13.8	12.9	11.3	11.2	14.8	12.3	11.8	10.9	7.5	10.8	11.2
Road Deaths per 100,000 Population	25.1	27.5	30.5	29.8	29.2	35.2	32.8	35.7	32.2	32.2	33.4	30.4	27.0	26.3	24.2
Homicides per 100,000 Population	1.5	1.5	1.1	1.3	0.6	1.0	0.8	0.8	1.5	1.4	1.7	2.0	1.9	2.1	-
Ratio of Suicides to Road Deaths	1.6	1.8	2.3	2.0	2.1	2.7	2.9	3.2	2.2	2.6	2.8	2.8	3.6	2.4	2.2
Ratio of Suicides to Homicides	0.09	0.10	0.08	0.09	0.04	0.08	0.07	0.07	0.10	0.11	0.14	0.18	0.25	0.19	-

Source: Australian Bureau of Statistics. Causes of Death. A.B.S. Canberra 1963-1977

The average daily consumption of alcohol (in grams) for each state during February 1977 was as follows:

N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.
22.01	20.27	20.13	18.68	23.01	16.80	37.75	20.60

Western Australia had the second highest consumption rate which, while being well below that of the Northern Territory, was above the consumption figure for the whole of Australia (20.98 grams). These figures must be read with caution however, as they are based on consumption for a period of only one week and relate only to those persons who drank during the week prior to interview.

An additional alcohol consumption measure worthy of brief discussion is private final consumption expenditure at current prices on alcoholic drinks. This expenditure ($) per head of population aged 18+ years during 1975-1976 for each State was as follows:

N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.
311.0	242.0	301.1	255.1	304.1	264.9

In this instance New South Wales includes the Australian Capital Territory and South Australia includes the Northern Territory. Western Australia's expenditure per head of the adult population was the second highest among the six states, and again was higher than the Australian per capita expenditure of 282.0.

It is not easy to derive from the above anything more than suggestive relationships. It can be seen, however, that in comparison with the other states, the limited data available shows Western Australia to have the second highest road death rate, the second highest alcohol consumption and expenditure rates - and the third highest suicide rate. This could be much more than coincidental, the relationship between drunken driving and death on the roads being well established. The suicide link may be less substantial since the road deaths were two and a half times the number of suicides - and homicides were ten times less. Moreover, between 1969 and 1973 Western Australia with the second highest suicide rate amongst Australian states had one of the lowest murder rates (known to the police) per 100,000 of the population.

This is perhaps as far as the available data can be taken. Much more direct research is required to establish the fact that there are connections between these figures - and that such connections are causative.

SUICIDE AND SOCIAL INTEGRATION IN WESTERN AUSTRALIA

Discussion below of the reasons for suicide rates covers some of the theories which have been advanced. There is however one form of measurement for prediction purposes which it was felt should be tested in Western Australia. In 1964 Gibbs and Martin[9] published their measure of what was essentially Durkhem's social integration retranslated into public expectations and reactive conflicts in role and status. The question arises as to whether this measure would have been a useful guide to suicides in Western Australia.

Gibbs and Martin had essentially operationalized Durkhem's theory of suicide by examining and analyzing social integration in terms of the stability and durability of social relationships within a population. Their reformulation of Durkhem's basic theory was: 'The suicide rate of a population varies inversely with the degree of status integration in that population'. The more frequently a combination of statuses in individuals conformed to combinations most common in the populations to which they belonged, the higher would be the status integration of that population.

At the international level, Gibbs and Martin tested their theory by means of computing the correlation coefficient between suicide rates and measures of the integration of labour force status with sex. The latter was based on the proportion of males and females aged 15+ years who were (a) economically active (members of the labour force) and (b) not economically active (outside the labour force). Using data from thirty two (32) nations, they found a correlation coefficient of -.586; countries with high suicide rates tended to have low scores for the integration of labour force status with sex and vice versa. It is worth noting that Gibbs and Martin were constrained in their research by the adequacy of data available to them; for

[9] Gibbs, J.P. & W.T. Martin. 'Status Integration and Suicide' Eugene: University of Oregon Press, 1964.

some countries suicide rates were only available for one or two years, while many countries had no data on participation in the labour force by sex which automatically excluded them from consideration. However, within the limits of the available data and countries chosen, the measure appeared to be meaningful.

A test of this formula in Western Australia meant first comparing the integration of labour force status with sex - and the average annual suicide rate in Western Australia - with the previously mentioned thirty two countries; and second it meant comparing the correlation coefficient derived from the data set which included Western Australia with that initially computed by Gibbs and Martin.

Obviously Western Australia is not a separate nation, being part of a federation of states : but, as both the suicide and integration measures are population based, it was not inappropriate to compare Western Australia with the Gibbs and Martin list of countries.

Amongst the countries examined by Gibbs and Martin was the Australian federation so that the data for Western Australia, used in the present test, was, at that time, a subset of the aggregate data for the country as a whole. Despite this apparent overlap, the Australian figures derived by Gibbs and Martin were retained for the purpose of the present exercise rather than being altered to give an "Australia except Western Australia" presentation. Again, for comparability, it was necessary to take the span of years which had been covered by Gibbs and Martin, (i.e. circa 1945-1949). Fortunately, the 1947 census, including data on labour force participation by sex, and annual suicide rates for Western Australia was available for the period 1945-1949. Naturally there could be no guarantee that whatever held true at that time would still hold true in 1975-1979. Nevertheless the test was thought to have value not only in giving a clearer account of Western Australia but in considering the value of a wider use of the Gibbs and Martin formula

TABLE 7

SUICIDE RATES AND THE INTEGRATION OF LABOURFORCE STATUS WITH SEX - SELECTED COUNTRIES CIRCA 1950

	YEAR OF SUICIDE RATES	AVERAGE ANNUAL SUICIDE RATE	RANK	YEAR OF LABOUR FORCE DATA	MEASURE OF THE INTEGRATION OF LABOURFORCE STATUS WITH SEX	RANK
Denmark	1948-52	23.9	1	1950	1.29	27
Austria	1949-53	23.4	2	1951	1.24	32
Switzerland	1948-52	22.4	3	1950	1.35	19
Hungary	1955	20.6	4	1949	1.37	14.5
West Germany	1948-52	17.9	5.5	1950	1.25	30
Japan	1948-52	17.9	5.5	1950	1.22	33
Finland	1948-52	16.4	7.5	1950	1.28	28
Cuba	1948-49	16.4	7.5	1953	1.54	5
Sweden	1948-49	15.6	9	1950	1.34	23
Belguim	1946-48	14.7	10	1947	1.32	26
France	1945-47	12.4	11	1946	1.25	30
United States of America	1948-52	10.9	12	1950	1.25	30
England/Wales	1949-53	10.4	13	1951	1.33	23
New Zealand	1944-46	10.3	14.5	1945	1.34	23
WESTERN AUSTRALIA	1945-49	10.3	14.5	1947	1.40	9.5
Portugal	1948-51	10.1	16	1950	1.44	8
Australia	1946-48	9.7	17	1947	1.40	9.5
South Africa	1944-48	8.8	18	1946	1.39	11.5
Israel	1947-49	8.6	19	1948	1.39	11.5
Canada	1949-53	7.4	20	1951	1.35	19
Norway	1945-47	7.2	21	1946	1.37	14.5
Netherlands	1946-48	7.0	22	1947	1.35	19
Ceylon	1944-47	5.9	23	1946	1.38	13
Yugoslavia	1950-54	5.0	24	1953	1.33	24.5
Venezuela	1950-51	4.7	25	1950	1.52	6
Chile	1950-51	4.4	26	1952	1.39	11.5
El Salvador	1950	4.1	27	1950	1.60	3
Greece	1955	3.6	28	1950	1.49	7
Costa Rica	1950-52	2.5	29	1950	1.62	2
Ireland	1949-53	2.5	30.5	1951	1.34	23
Bolivia	1947	2.5	30.5	1950	1.36	16.5
Guatemala	1948-49,1952	1.5	32	1950	1.66	1
Mexico	1952, 1954	1.0	33	1950	1.55	4

Source : Gibbs and Martin Op. Cit.

Table 7 gives statistics of suicide rates and the integration of labour force status with sex for the countries examined by Gibbs and Martin, plus corresponding figures for Western Australia. The latter's average annual suicide rate during 1945-1949 was 10.3 per 100,000 mean population; this score had a rank order of 14.5 among the thirty three territories under consideration. Western Australia's suicide rate circa 1950 was similar to that for countries such as Portugal, New Zealand, England and Wales, and the United States, but was considerably lower than rates for countries like Denmark, Austria, Switzerland, Hungary, West Germany and Japan.

On the other hand, the value of the measure of the integration of labour force status with sex for Western Australia (1.40) was found to have a rank order of 9.5, the same as had been the case for Australia as a whole. Only Guatemala, Greece and Portugal had higher values for this measure than did Western Australia. Integration scores for South Africa, Chile, Ceylon (Sri Lanka), Norway and Hungary were slightly lower than that for Western Australia.

The calculation of the integration of labour force status with sex for Western Australia is detailed below to illustrate Gibb's and Martin's method.

	Males	Females
Population aged 15+ years	N = 189,061	N = 177,693
Economically active (members of the labour force)	N = 162,974 X = .862	N = 41,990 X = .236
Not economically active (not members of the labour force)	N = 26,087 X = .138	N = 135,703 X = .764
	ΣX = 1.000	ΣX = 1.000
	ΣX^2 = .762	ΣX^2 = .640

$$\Sigma\Sigma X^2 = 1.402$$

The correlation coefficient between the two measures under consideration for the thirty three territories included in Table 7 was found to have a value of -.586, ie. the same value computed by Gibbs and Martin for the thirty two countries included in their study. Thus the inclusion of statistics for Western Australia in the data set used by these researchers had no effect on the value of the correlation coefficient.

Most significant however were the rank orders of the suicide rate and integration of labour force status with sex for Western Australia. With a rank order for suicide at 14.5 Western Australia had an integration rank of 9.5. This meant that the relationship for a country like Hungary (rank 4 for suicide and 14.5 for integration) was to some extent the reverse of that for Western Australia. The integration rank was the same as for Australia as a whole but the suicide ranking was lower.

On the basis of the median score for suicide and integration rates as employed by Gibbs and Martin, Western Australia's suicide rate was above the median (i.e. was a high suicide rate) but the integration score was also above the median (i.e. reflected high integration). This was contrary to the Gibbs and Martin expectation. They had argued for an inverse relationship i.e. countries with high suicide rates were supposed to have low integration scores and vice versa. From the above analysis and the data presented in Table 7, it can be seen that Western Australia does not fit this pattern. It belongs to that group of nations which either scored highly on both measures or had low scores for both measures, namely Hungary, Cuba, Portugal, Australia, Netherlands, Canada, Yugoslavia and Ireland.

THE CASES FOR 1978

For the purpose of this study, all the cases categorised as suicide in Western Australia in 1978 in the Report on Death submitted by coroners to the Crown Law Department were examined. The information was abstracted from 101 files with appropriate safeguards for confidentiality. One of these files was found to refer to a death in 1976 and was excluded. Of the 100 remaining, 20 files referred to deaths occurring in 1977 - but finally reported on, and the file closed in 1978. There were, however, two cases in which the death occurred in 1977 and the final report was signed on 30 December, 1977. It was felt that these would not affect the sample and they were included. What was being sought in this part of the study was a sample of cases for closer consideration of the circumstances of death. The year 1978 was chosen to set a time period : the purpose of the study is not, therefore, materially affected by the inclusion of two cases from a previous two days. It simply means that to be absolutely accurate, the period covered by the 100 cases is 30 December 1977 - 31 December 1978, i.e. death actually registered as suicide (but not necessarily occurring) during this period.

Sex, Age, Method and Marital Status

Of the 100 cases 22 were female and there was one joint suicide of a male and female which could have raised the females to 23: but, as in this case, the male arranged the joint suicide and it appears that the woman was not in a condition to indicate true freedom of choice - she has not been counted amongst the females who took their own lives.

The ages of the 22 females were as follows:-

Between 40 and 57 inclusive	12
Between 62 and 78 inclusive	4
Between 35 and 37 inclusive	2
Between 16 and 22 inclusive	4

Of those in the 40-57 age group, two drowned themselves, two hanged themselves, seven took a solid or liquid poison and one asphyxiated herself with a plastic bag. Two of the 62-78 group hanged themselves, one cut her throat and the other took an overdose of amylobarbitone. The 35 year old woman took an overdose of imipramine whilst the woman of 37 used a gun. Of those between 16 and 22 three took poison and one shot herself. The youngest - the girl of 16 took an overdose of doxepin; the 18 year old used her fathers .44 rifle.

The difference between males and females in method may be shown as follows:

Method	Male	Female	Total
Poisoning (Solid or Liquid)	17	12	29
Poisoning (Carbon Monoxide)	25	-	25
Hanging	9	4	13
Cutting and Piercing	2	1	3
Firearms	20	2	22
Drowning	1	2	3
Plastic Bag	1	1	2
Jumping from Buildings	2	-	2
Electrocution	1	-	1
Total	78	22	100

The age group preferences for method were as follows:

Method	Age						
	Below 20	20-30	30-40	40-50	50-60	60+	Total
Poisoning (Solid or Liquid)	4	6	4	6	7	2	29
Poisoning (Carbon Monoxide)	3	4	4	5	5	4	25
Hanging	-	3	3	2	2	3	13
Cutting and Piercing	-	1	-	-	-	2	3
Firearms	2	8	3	6	-	3	22
Drowning	-	1	-	1	1	-	3
Jumping from Buildings	1	-	-	1	-	1	2
Electrocution	-	1	-	-	-	-	1
Total	10	23	14	22	16	15	100

23% of all the males committing suicides chose a solid or liquid poison (i.e. an overdose) but this method was favoured by no less than 51% of the females. It is striking however that no females chose the method of carbon monoxide poisoning - a style of self destruction favoured by 32% of the males. Again 24.3% of male suicides used a gun but this method was used by only 9% of the women. The fact that the two persons who jumped from buildings were both male may not be significant since the numbers are small and only one year is being covered. The same would apply to the differences between males and females in the drownings and electrocution. It is interesting to see that the plastic bag cases were evenly divided but that proportionally more of the women chose to hang themselves (18.1%) than the men (11.5%).

When the age and method pattern is shown it gives the impression of a fairly even distribution. It is true that none of those under 20 hanged themselves, drowned themselves or used sharp instruments, but this could be a function of the small numbers and the short time span. 50% of the 50-60 age group

chose an overdose of pills or tablets or some other form of liquid or solid poison; another 30% chose carbon monoxide but generally as between the age groups there is nothing to distinguish one from another which cannot be due to the limitations of the sample itself.

Of the 78 male suicides, 30 were single, 27 were married or had lived in a de factor relationship for at least three years, and a further 17 were either divorced, widowed or separated. In four instances it was not possible to ascertain the deceased's marital status from the available information. Three of these males were aged 55-64 while the fourth, aged 32 years, died in prison from vagal inhibition due to hanging. On the other hand, only four of the females who committed suicide were single while eight were married and a further eight were widowed, divorced or separated. The marital status of the remaining two females could not be ascertained; one was aged 52 years with a long history of mental depression who died by paraquat poisoning while the other, aged 70 years, slashed her neck following many years of deep mental depression.

A full breakdown of all suicides by age, sex and marital status is presented in Table 8. Over half the single males were aged less than 25 years and only one was older than 55. More than a half of the married males were aged between 35 and 54 years, while 11 of the 17 males who were widowed, divorced or separated were aged less than 45 years.

All of the single females who committed suicide were aged less than 25 years and the eight married females were all aged between 35 and 64 years. The oldest woman who committed suicide was a 78 year old widow who hanged herself. She was suffering from Parkinson's disease and had twice attempted suicide by taking an overdose of tablets.

The breakdown of suicides by age, sex and method employed is given in Table 9, which employs conventional grouped quiennial age categories and eight major categories of method employed. In this table the two cases of suffocation using plastic bags are included in the 'hanging' category, as this category, in the International Classification of Diseases,

Injuries and Causes of Death (I.C.D.) also includes strangulation and suffocation. It is worthy of note that all the 25 males who killed themselves by gas used carbon monoxide from automobiles and that more than a half of this group were under 45 years. Among males, firearms were favoured by younger persons (13 out of 20 were under 44). Also, nine of the 17 males who died by solid or liquid poisoning were under 35 years old. Over a half of the females died by this later method, and nine of them were aged between 35 and 64 years.

Of interest are the differences between suicide rates by marital status and sex for suicides in Western Australia during 1967 and 1978, the former having been examined by Burvill. He found that among males the highest rate was for those separated (182.6 per 100,000), followed by the widowed (52.5), the single (28.5), the divorced (26.7) and then the married (14.5). The descending order for females was the separated (167.1), the divorced (52.9), the widowed (36.5), the married (12.5) and the single (6.6). Burvill concluded that his findings were similar to Durkheim's in that, allowing for age, the divorced and separated had the highest suicide rates, the single and widowed next highest and the married the lowest rates.

Analysis of the 1978 cases revealed that for both sexes the widowed/divorced/separated had the highest rates : 59.4 per 100,000 for males and 12.9 for females, followed by the single (24.2 and 4.7) and then the married (10.4 and 3.1). Thus the overall pattern of suicide rates by sex and marital status in 1978 was similar to that in 1967 with married persons being at far less risk than the single, widowed, divorced or separated.

TABLE 8 - Suicides by Age, Sex and Marital Status

Western Australia, 1978

AGE (years)	MALES					FEMALES				
	Single	Married	Widowed Divorced Separated	Not Known	Total	Single	Married	Widowed Divorced Separated	Not Known	Total
15-24	18	1	1	-	20	4	-	-	-	4
25-34	6	5	4	1	16	-	-	-	-	-
35-44	2	7	6	-	15	-	4	2	-	6
45-54	3	8	3	-	14	-	3	3	1	7
55-64	-	1	1	3	5	-	1	1	-	2
65-74	1	5	1	-	7	-	-	1	1	2
75+	-	-	1	-	1	-	-	1	-	1
TOTAL	30	27	17	4	78	4	8	8	2	22

Source: Western Australia, Crown Law Department - Reports on Death, 1978

TABLE 9 - Suicides by Age, Sex and Method Employed

Western Australia, 1978

MALES

AGE (years)	Poisoning (Solids & Liquids)	Poisoning (Gas)	Hanging	Drowning	Firearms Explosives	Cutting Piercing Instrum.	Jumping	Other	Total
15-24	3	6	1	1	7	-	1	1	20
25-34	6	4	4	-	1	1	-	-	16
35-44	12	6	2	-	5	-	-	-	15
45-54	4	5	1	-	3	-	1	-	14
55-64	1	1	1	-	2	-	-	-	5
65-74	1	3	-	-	2	1	-	-	7
75+	-	-	1	-	-	-	-	-	1
TOTAL	17	25	10	1	20	2	2	1	78

FEMALES

AGE (years)	Poisoning (Solids & Liquids)	Poisoning (Gas)	Hanging	Drowning	Firearms Explosives	Cutting Piercing Instrum.	Jumping	Other	Total
15-24	3	-	-	-	1	-	-	-	4
25-34	-	-	-	-	-	-	-	-	-
35-44	3	-	2	-	1	-	-	-	6
45-54	4	-	1	2	-	-	-	-	7
55-64	2	-	-	-	-	-	-	-	2
65-74	-	-	1	-	-	1	-	-	2
75+	-	-	1	-	-	-	-	-	1
TOTAL	12	-	5	2	2	1	-	-	22

Source: Western Australia Crown Law Department - Reports on Death, 1978

Place of Residence and Place of Occurrence

Using the available information each suicide case was classified on the basis of the place of residence of the person committing suicide and the place where the suicide actually occurred. It was decided to use three categories for each classification : suburban (including metropolitan Perth and environs), urban (towns outside of Perth) and rural. In all instances it was possible to ascertain the place of occurrence but in one case it was not possible to determine the place of residence of the person who died. This involved a male, aged twenty years, who shot himself following several previous suicide attempts and treatment for agitated depression.

This rather crude analysis revealed the following:

Location	Suburban	Urban	Rural	Not known	Total
Place of Residence	70	22	7	1	100
Place of Occurrence	65	22	13	-	100

The majority of suicides were thus committed in the Perth metropolitan area and the majority of persons who committed suicide were resident there immediately prior to their deaths. Furthermore, in 55 of the cases the persons concerned killed themselves in their place of residence while the remaining 45 committed suicide elsewhere.

As regards female suicides there were seven cases involving urban females (no cases of rural females were recorded) of whom two were married, two were single, one divorced and two of unknown marital status. Burvill too, had noted an absence of female suicides among the single, separated and divorced in areas outside Perth.

This contrasts with 47 per cent of female suicides occurring in areas outside Perth in 1978 : but when this is compared with the proportion of females in the population the rate for non-metropolitan females was considerably less than for those in metropolitan areas i.e. 1.7 per 100,000 compared to 5.0 per 100,000 for females aged 15+ years. Two of the four single females who committed suicide were non-metropolitan residents and two of eight females who were widowed/divorced/separated were also living outside Perth. Thus in 1978 there was evidence to suggest that the rural areas were not so free of female suicide as they had been in 1967.

There were obviously some difficulties arising from the residential mobility of several of those persons who committed suicide, instances of persons inflicting wounds, taking poisons etc. in their residence and consequently dying in another locality (e.g. hospital) and, in some cases, a lack of detailed information in the files available.

As between the place of residence, the place of occurrence and the method employed, a number of clear and sometimes obvious, patterns emerged. As might be expected the three cases of drowning all occurred at different locations to the residences of those deceased : and the majority of those persons taking solid and liquid poisons did so at their own places of residence. Not quite so expectedly, most of those who died by carbon monoxide poisoning had driven their cars away from their homes before attaching a tube to the exhaust.

Some interesting individual situations emerged. In one case, a man of no fixed address registered himself at a country hotel prior to taking an overdose of tablets in his room. Therefore the place of residence and place of occurrence were the same. Another male of 42 years killed himself at the rear of the store where he was employed.

Choice of Method

It would seem from the evidence available that people contemplating suicide seek, as a rule, the least painful and messy procedures for disposing of themselves. The different forms of poisoning, therefore, accounted for over 50 per cent of all the cases.

(a) Poisoning (1)

Poisoning by taking some noxious solid or liquid was the most favoured way of committing suicide. 29 - nearly a third of all those committing suicide chose this avenue of departure - and 11 of these were women. Those who took overdoses of addictive drugs are, of course, included in this category, but in fact there were only three drug addicts as this term is usually known. One drug abuser of 26 both drank Phenol and then used a hypodermic syringe to inject himself with Phenol - at a time when he was clearly not in normal possession of his faculties. An alcoholic of 41, who was also a drug abuser, took sodium amytol. A divorced man of 33, who ingested an overdose of barbiturates, had been advised in a letter from his father to "leave those damn drugs alone". A borderline case was that of a woman who took seconal sodium and who was thought to be taking marijuana.

On the other hand, many of those who took their lives by poisoning or any other method, either deliberately got drunk or were under the influence of alcohol when the did so. A youth of 17, for example, had a blood alcohol reading of 0.220 when he took an overdose of digesic tablets. In these cases the circumstances confirmed an intention to take life, so that the alcohol was taken just to make the final act easier : but this was not the case with one aboriginal woman of 22, who was unmarried but had three children. She had been in the habit of drinking heavily and on the night she died, she had been enjoying herself with friends, first at a hotel, then later in a car. They had been drinking and sexually intimate. When she got home she took digesic tablets before going to bed. Her sister who got her a glass of water did not see how many tablets she took. Maybe the woman did not know herself how many she was taking, because the autopsy disclosed a blood alcohol content of .247 and a urine alcohol reading of .345.

Attention has already been drawn to the relationship in Western Australia, between alcohol consumption and both death on the roads and suicide. It would be an unwarranted conclusion that drunken people are more likely to kill themselves (or others on the roads) : but it is clear from the 1978 figures that a not insignificant proportion of those who commit suicide have recourse to alcohol before or during the act. And others may have done so without the fact being recorded.

The poisons favoured were nearly always amphetamines or barbiturates, so that the verdicts refer to desipramine, imipramine, propoxyphene, pentobarbitone, parecetamol dextropropoxphene, amylobarbitone : but there were also poisons such as seconal, paraquat (weed killer), soneryl propranolol, doxepin, chloral hydrate, mandrax, chlordane, digesic, caustic soda, hydrochloric acid.

Some were taking overdoses of drugs prescribed for their diseases. Sometimes the pain or the feeling of a loss

of control led to the final decision to take an overdose. One elderly woman, who had many diseases which she had borne with patience, felt she could not withstand the additional burden of Parkinsons disease and her consequent loss of balance and limb control - so she took an overdose of barbiturates. Another already suffering with cancer and a form of mental disturbance took a fatal dose of amylobarbitone. One man of 68, who took an overdose of pentobarbitone in Nembutal tablets, said he was tired and weary, could no longer look after himself, but did not wish to go into a hospital or institution. He apologised to the police for the unpleasant task he had left them.

At the other end of the age scale, a girl of 16 took doxepin when her 18 year old boyfriend preferred someone else: and a boy of 15, who took mandrax tablets which had been prescribed for his employers' spinal injury, left a note saying that he had hoped to be a millionaire by 30, but could not now see this happening - and he hated his mother'.

Poisoning (2)

There were no poisonings by heads being placed in gas ovens etc., but that is because gas ovens are not in use in Western Australia. Instead, and ranking a close second to ingested solid or liquid poisons, was the use of the car exhaust for self-destruction by carbon monoxide poisoning. This recourse to the motor vehicle as a suicide instrument occurred in 25 of the 100 cases in Western Australia in 1978. These were all male suicides, however. The only woman involved probably knew little about it. She was an elderly lady of 76 who had been losing her faculties for some time and who had to be cared for by her husband of 74. The possibility of her having to be institutionalised and their being separated during their last few years motivated him to organise a joint death in their car. The appeal of carbon monoxide for self-destruction knew no age barriers. A young man of 18 chose this way out when his girlfriend married someone else: and a 19 year

old, who poisoned himself with carbon monoxide gas, gave no reason beyond the trivial concern which he had at the possible family disgrace if he lost his driving licence. Between these younger and older groups were others with a variety of precipitating circumstances. A man of 38, recently divorced and unable to see his children, was also unemployed and in debt. Another of 36 was also out of work, divorced and apparantly depressed. Similarly a 32 year old, though only married for 4½ years, committed suicide in this way because he could not live without his wife who was leaving him. He had had previous treatment, however, for fits of depression. One person of 24, whose wife had left him, was on bail for an assault case and got drunk before he took his life. And a man of 50 wanted for questioning by the police in a case of stealing as an agent, had said before making his decision that he had only three ways to go - to leave the State, give himself up to the police, or commit suicide.

In other cases there were previous attempts at suicide - usually by other methods, but sometimes there was no obvious reason for the action. In one case a man of 53 had poisoned himself with carbon monoxide in his car and the only reason which could be advanced was that he was "moody". A 65 year old simply drove to a parking lot near the beach, taking a bottle of whisky to drink whilst the gas filled the car. Similarly a man of 41, who had a satisfactory family life and his own business, left no reason for chosing this way to die. Sometimes the reasons were seemingly inadequate from any objective viewpoint, but doubtless of overwhelming importance to the person concerned. A young man of 19 had trouble with his back, was fed up with his job and not doing so well at night school. He took three cans of beer with him and sat in the car drinking these after he had attached a pipe to the exhaust. Another 19 year old had left a note showing that he took his life because a girl of whom he was

enamoured (but with whom no close relationship had developed) did not want him.

(b) Hanging

There were thirteen cases of death by hanging, four of them being female. One of the women was 78 years of age, who had been suffering from Parkinsons disease and had made two other attempts to end her life. Two cases were previously diagnosed mental patients. A man of 26 was schizophrenic and taking marijuana; another, 53 years of age, was similarly disturbed. On the other hand, a man of 33 hanged himself after his wife had left him with four children and he was about to be evicted: he was under the influence of drink when he took his life. Three of the cases of hanging occurred whilst the person was in custody. The files provided no reasons for a 32 year old and a 26 year old hanging themselves in their cells. In one case a cell mate was sleeping in the same cell at the time and there was a hint of homosexuality. On the other hand, an Aboriginal prisoner who committed suicide by hanging himself in the police lock-up was already in quite serious trouble with his family and tribe as a result of extra-marital relations which had become known.

(c) Drowning

There were only three cases of drowning recorded and two of these were women. The male case, for which there was no apparent reason, was that of a naval rating of 23, about to complete his period of service. Though he was drunk at the time, he left little doubt about the success of his attempt by securing a 300 lb. pulley around his waist. Of the two females, one was a middle aged woman depressed by the loss of her husband two years before. She had previously talked of drowning herself and was actually seen doing it by people who did not realise what was happening until it was too late. She had left a terse note for the family "Gone to jump in the lake - Mum". The other woman was 49 years of age, had a long record of mental illness and had been treated for depression. She had tried to take her own life on four or five

occasions previously.

(d) Shooting

Self shooting was the method chosen by 22, i.e. one-fifth of those who committed suicide. Only two of these were women - one a girl of 18 who could apparantly see no future for her love of a married man whose wife was her friend - and who was also disturbed at the impending separation of her parents: the other, a woman of 37, was found by her children having shot herself with her husband's gun - because, as she wrote, she had "ruined her life through taking too many tablets" and was losing control.

The others follow a familiar pattern. A man of 63 shot himself after he had had a stroke and could not drive his car. Because of his disability he could not pull the trigger and had to fix the gun in the fork of a tree where the trigger would be caught as he pulled the gun towards him. Another 74 year old male was sick and in pain when he shot himself. A man of 23, who was a heavy drinker, was under notice by the girlfriend with whom he co-habited to leave that day. Another 20 year old was at the university and being treated by the hospital for "agitated depression" after he had tried to leap from a high building. He was said to be suffering from a dominating mother. A marriage breaking up after 26 years because the 45 year old husband had a girlfriend led to him taking his own life, but without giving any more specific reason. A man of 63, who had ill health and hernia, but who was comfortably settled on his own property, committed suicide with a gun whilst worrying not only about his health, but about damage to his farm caused by a typhoon. One other person - a man of 45 shot himself after being discovered shoplifting and having escaped. Others chose this way out due to worries about sickness. A 20 year old man, who was on drugs and suffering from VD shot himself, leaving a note saying "To kill myself I have to be crazy. Who wants a crazy person hanging around?" This person was also unemployed but said not to have been particularly worried

about it. Another of the same age got drunk and shot himself after being rejected by a girl of 15. This was also the reason for a boy of 17 shooting himself though apparently no intimate relationship with the schoolgirl of 15 had developed. Then there was one self-shooting by a mental patient, who was also an alcoholic.

(e) Cutting or Piercing

Only three persons stabbed or cut themselves to death. A woman of 70 cut her throat after complaining of headaches. She had been depressed and tried to take an overdose of pills once before. Later she had tried poison and failed again. The other two men who stabbed themselves were a 66 year old who used a fishing knife on his left side below the rib cage. He was still alive when found and said "I have decided to do away with myself, I can't stand the pain any more". He died in hospital about five hours later. He had had heart trouble. The other case concerned a man of 26 years who had, for a long time, been treated for paranoid schizophrenia and who was an alcoholic. He used a kitchen knife to stab himself in the chest.

(f) Others

The other cases include two in which plastic bags were used, two cases of jumping from high buildings and a case of electrocution. This last case was that of a young man of 20 who left a note saying "I feel as though this is as far as I'd like to go in life" and then attached wires to his wrists before plugging them into the electricity. No other reason for the suicide was apparent. One man of 63 and one woman of 42 committed suicide by tying plastic bags around their heads. The woman had been receiving treatment for depression, but no other reason for suicide was given. The man had also taken Chlordiazcpoxide and had a blood alcohol content of 0.194. He used the bag but he also wrote that he had taken his sleeping pills and brandy and waited for the tiredness to come. He was

apparently disappointed in the outcome of a second marriage. The two jumpers included a 17 year old who had attempted suicide before. He had been treated for anxiety symptoms relating to home affairs, unemployment and his homosexuality.

Previous Attempts

The overwhelming majority of those who took their own lives had not previously attempted suicide or even threatened it - according to the reports available to investigators. This was the position with over 70 per cent of those who died by their own hand. There was in many cases complete surprise - particularly where young people killed themselves, either for reasons which did not appear sufficient to those around them, or without any apparent reason. The extent to which previous attempts are a guide to future success in suicide may, therefore, be questioned. Some of the older people taking their own lives had not, it seems, had previous reason to do so. They appeared to adopt suicide as a solution to real problems of pain, loneliness and fear of institutionalisation.

Where attempts had been made, the person had usually been under psychiatric care - sometimes in a hospital, sometimes at out-patient clinics. They were usually said to have been treated for depression, but in two or three cases there was a pronounced psychosis registered in the diagnosis. But not all psychotics made previous attempts. One man of 53 who hanged himself had been admitted to hospital about nine months before, believing his dogs were witches who would kill him, that his neighbours were bewitching him to death and that one of the nursing staff was the devil. He was treated with medication, recovered from his delusions and discharged from hospital about a month later. He had follow up treatment at the clinic. There was no record of a previous suicide attempt before he hanged himself. In one other case a person had repeatedly tried to do away with himself and eventually

succeeded.

This is not to say that there were not attempts at suicide not actually recorded. There could have been attempts thwarted within the family. It probably does mean, however, that any such attempts as were not recorded had not gone so far as to require medical or hospital treatment - for this would have meant a record which would later be disclosed when the suicide was successful.

In this account, talking of or threatening to commit suicide are not regarded as previous attempts. In the reports available they were mentioned frequently. Particularly the young people disappointed in love threatened suicide before the actual deed. Others thought they were just being dramatic or else were sure they had talked them out of it. But a large number of those who took their lives gave no previous indication of their intentions. Once again the precise significance of this is difficult to evaluate. Investigators could not carry out the exhaustive inquiries which would have been necessary to ensure that an intention was never mentioned to anyone. Again, the recourse to a threat of suicide as a blackmail to keep a partner, is too often used for it to be easy to distinguish the real from the purely dramatic.

Reasons for Suicide

One hundred cases will not give adequate answers to the vexed questions involved in self destruction. Social isolation or integration, a feeling of belonging or not belonging, community linkages, alienation, idealism, internalised aggression, revenge, despair, or rational responses to impossible situations are all possible explanations of the facts in individual cases. In the last analysis each case is unique - although it is well established that social models and pressures are powerful in the personal decisions to commit suicide. One hundred cases will not provide the reasons for suicide in Western Australia. A longer time span and a more intensive study of each life history would be required. Nevertheless the hundred cases here discussed are not a sample - but the entire "population" of suicides for the time period under consideration. They do therefore offer a faithful picture of suicide in Western Australia in 1978.

A picture is only as faithful as it is complete, however; and when reasons for suicide are being considered the fullest possible information is needed. Obviously this was not usually available in the case files. Even if it had been always available it would have been amenable to varied interpretations. Moreover the angles of interpretation would differ. By definition the angle of the suicide himself (or herself) cannot be fully available. Where a note is left this may give reasons - but are they the real reasons? Is he or she able at that time to express his or her feelings adequately? Does the suicide always have the educational facility to express what is in his (or her) heart and mind? Often a note is not left and there is only a last word or statement of feelings or intentions.

Apart from the suicide there are the accounts of relatives, friends, employers, psychiatrists or other medical practitioners, police investigators etc. Each one has reasons for his interpretations. Described situations may be coloured with hindsight, the facts being adjusted to the later act of suicide. Those reporting may have certain facts to hide or interests to protect. So maybe no file will be completely faithful to the true situation. Indeed, the "true" situation may be impossible to understand unless all possible accounts are collected in great detail and then interpreted in several possible ways. And when both subjective and objective accounts are combined from all angles in a range of possible interpretations one will still be faced with the problem of "truth".

Nothing like that could be attempted on the data available for this study. The files were compiled for administrative purposes to determine the cause of an unnatural death. To a large extent the reasons were irrelevant though they might establish an intention to take ones life which would accord with the other facts and thereby exclude alternative causes of death e.g. murder or accident. If at all possible a reason was assigned. The diseased was said to have taken his own life "apparantly whilst depressed" when there was no other indication available. There were cases however, in which even the general umbrella of depression could not be used.

The writer was obliged to provide his own interpretation of the facts available in the files. In some cases these were more complete than in others. 67 of the 100 suicides left notes but not all of these gave reasons - and some were obviously insufficient reasons in that they left the impression that there must be something more. Of course a reason insufficient to the outsider could well have been overwhelmingly sufficient to the suicide : but "insufficient" is used here where it would not have appeared to provide a reason for suicide even if magnified by a fevered or disturbed mind. 33 of the cases left no notes at all and here their reasons had to be culled from the information on their lives and the circumstances of their deaths available in the files.

The other problem about assigning causes is that they are not mutually exclusive. To say that an elderly man took his life "with no reason" is not to exclude the possibility that he took it because of "Age/Pain". To conclude that a person destroyed himself because of "mental illness" is not to exclude the possibility that he was rejected by friends or a victim of drugs or alcohol - which could have precipitated the act. Conversely a perfectly rational choice of death need not exclude the onset of a form of mental illness even if this has not been medically diagnosed. There is a measure of subjectivity therefore in the account of reasons for suicide provided below. The writer has been obliged to assign the reason (or lack of it) which seemed best to fit the facts reported in the file.

It was decided to approach the problem of classification by "reason" in successive stages. First, all cases were divided according to whether the reasons were clear or not. This gave the following break down:-

No Reason Given or Suggested:	47
Desperation	7
Mental Illness	10
Separation (or feared separation) from spouse	8
Age/Loss of Spouse	2
Age/Incompetence	1
Age/Pain	9
Tribal Trouble	1
Rejected by Girl Friend	6
Rejected by Boy Friend	2
Pain	1
Drugs	3
Alcohol	1
Illness/Depression	1
Unrequited Love	1

In the large number of cases with "no reason" it was clear that there were many cases in which a reason could be adduced from the circumstances. However, if the case had been assigned to the "no reason" category it was because even when a reason could be adduced it was not sufficient to explain the suicide to an outsider - even if it was in fact more than

sufficient in the mind of the suicide. For example, the boy of 15 who took an overdoes of pills had left a note saying "I said I would become a millionaire by 30 - I hate my mother" Despite the note there did not appear to be any adequate reason here for suicide : so it was classified as "no reason". Again, a woman of 43, separated from her legal husband - who was living with her de facto when she took an overdose of pills was said to be worried about the possible loss of her children in the divorce proceedings. However, there was no note to this effect and it was a concern which she must have had from the time she left her husband. The reason did not appear sufficient and the case was labelled "no reason".

For greater precision the 47 "no reason" cases were sub-divided into those in which any ascribable reason was insufficient and those, the circumstances of which gave no hint of the reason. The result was as follows:

No reason adducable	10
No sufficient reason adducable	37

The ten cases for which no reason at all was determinable included two prison hangings. One man was found hanging in a segregation cell. The other was found hanging in a cell he shared with another man who slept through the hanging. In this last case a suicide note indicated homosexuality - but no reason for the suicide. Of course, it could be supposed that the segregation led one to suicide and rejection of homosexuality - or worry about homosexuality was the reason for the other suicide but there is absolutely no evidence that any of these suppositions are justified.

There was the young naval rating who drowned himself very effectively. It was said that he had tried to kill himself twice before and at the time of his suicide he had blood alcohol percentage of 0.326. But he had been at a nightclub and he had earlier driven home with a girl in a taxi to get some money. At that time he had appeared perfectly normal and

although there was a reference to him appearing depressed at the nightclub this could well have been the effect of drink. Various guesses could be made therefore e.g. that alcohol made him suicidally depressed, that he had an undiagnosed problem of mental depression, or that his girl friend had disappointed him. But these seem so thin as explanations that it was considered safer not to speculate.

Another case of which no reason at all was adducible was that of a 43 year old station hand who shot himself. Here there were only oblique references to pains in the head and stomach but no other reasons even faintly appropriate. Also included in the "no reasons adducible" category was the 22 year old Aboriginal woman whose case has already been described - and whose death might have been accidental.

There were one or two in this same group who were not so young and who therefore could have committed suicide for reasons connected with their health or age : but again this is pure supposition. One man of 59 who had tried to commit suicide twice before and who had been admitted to hospital for overdoses of medication, flew from Perth into the country, drew all his assets from the bank, spent most of his time drinking at the hotel where he bought himself a nugget of gold. Then he went to his room and took an overdose of pills. Here reasons could be drawn from his age and circumstances but there seemed to be no justification for this. Similarly a man of 65 who drank secretly and became aggressive when his wife discovered it, had come to dinner smelling of whisky. His wife refused to eat her dessert. He therefore refused his own dessert, went out to his car, connected a tube to the exhaust and gassed himself with carbon monoxide.

The 37 cases for which there was "no sufficient reason" included the following:

1. A 17 year old homosexual, asthmatic, unemployed who jumped from a high building. He had tried once before and was said to have an identity problem He actually jumped immediately after discussing his problem with a friend. The friend went to another room and returned to find that the 17 year old had jumped from the balcony. Here there was reason - but hardly a sufficient one for a 17 year old person. As mentioned, this does not exclude the fact that this reason may have been more than sufficient to the mind of the suicide himself.

2. A single man of 47 who was a clerk and who had had psychiatric treatment for depression. He also jumped from a high building. As the medical report on the depression showed no previous attempts this was classified as "no sufficient reason".

3. A man of 53 who was a carpenter. He was said to be moody. He told a relative that he was going to kill himself : but he was not believed. He went out and used his car to kill himself with carbon monoxide.

4. A cook of 19 living and working in the country. He had had no illnesses but had been worrying about the losing of his driving licence being a mark against the family. His father thought he had been talked out of this : but he took the car and poisoned himself with carbon monoxide.

5. A farmer of 63 said to be depressed because of cyclone damage to the farm. He had had a hernia operation a month before. He shot himself.

6. A young married man of 27 who had been unemployed and in debt. He had however recently found work. His wife had one child and was expecting another. He used carbon monoxide and his death came as a great surprise.

7. A young naval electrician of 22 living with a girl and three other men in the same flat. They were troubled by a local "bikie" gang which would come to the flat, take their food, drink and possessions. When he tried to object,one of the intruders grabbed his genitals. He was hurt for some time afterwards. He drank heavily and told his girl "everything is getting to me"

Taking her for a ride on his motor-cycle shortly after the above incident he had said "I hope a truck comes and hits me". Soon afterwards he hanged himself.

8. A storeman of 26 was said not to be depressed when he hanged himself. At some time in the past he had been treated in New Zealand for schizophrenia. Whilst schizophrenia alone might be sufficient reason for suicide it was considered doubtful in this case.

9. A 21 year old who committed suicide after several trips to India. He was said to have a conviction that "they" were coming for him. He took an overdose of tablets. There was no previous medical or mental history.

10. An 18 year old who wrote:

"The reason I had to go is, one, the devil had my soul, two, there is someone up there who needs me. I'm sorry you had to put up with me but I'm better off dead."

There was a vague suggestion that he might have been worried about losing his girl - but this was two years before. Another possibility was that his father had a day or two before refused him the use of a van. None of these seemed sufficient.

Leaving now the large numbers of cases for which there was no reason apparant - or no reason which seemed sufficient to explain the suicide, the other cases classified were clear - if sometimes overlapping.

The seven cases categorised as "desperation" could sometimes have fitted into the other groups : but they were labelled "desperation" because the suicides seemed to have been driven into a corner from which they could see no escape. These were as follows:-

1. A man of 63 who made sure of his death by an overdose of tablets - and by pulling a plastic bag over his head. He also drank heavily - presumably before the suicide. He was a widower who had married a second time only to be cheated by his second family so that he had lost some $60,000 He was lonely, unloved, ageing, exploited, could see no way out - so he took his life leaving a note which gave his reasons as "Psorias - loneliness - loss of furtune"

2. A man of 33 who said in his note that he could not find anyone to love. He had had an ileostomy for chronic ulcerative colitis and had made several previous attempts to take his life - for which he had been treated mentally and physically, in hospital and at hospital clinics. He wrote before taking his overdose:-

   "Believe me I wanted to overcome this depression and deep suicidal feeling.... but came to the conclusion that I am a drop out on this earth."

3. A young man of 20 who was unemployed and consequently in financial difficulties. He was expecting to be charged with a traffic offence, was a drug abuser (though to what extent was not clear) and he had V.D. Before he shot himself, he wrote (as mentioned above): "To kill myself I have to be crazy. Who wants a crazy person hanging around?"

4. A builder's labourer of 45 who had been arrested for shoplifting but who had run away from the arresting officer. He shot himself.

5. A man of 50 who was being investigated for stealing as an agent was the subject of a case already mentioned above. He could see only three ways to go - to leave the State, give himself up, or commit suicide. He took the latter course using his car for carbon monoxide poisoning.

6. A car salesman of 38 whose divorce was finalised the month before he committed suicide and whose wife would not let him see the children. Carbon Monoxide.

7. A married man of 41 who had children but felt that he could not "go on being a failure". He also chose carbon monoxide.

It will be seen that these last two cases could have easily been included with the ones for which there was no sufficient reason. The circumstances appeared to disclose feelings which suggested a measure of desperation not quite so emphasised in the other cases. However it is quite obvious that there is a sense in which every case of suicide can be regarded as a case of desperation.

It is a final state of despair or no hope. This is the subjective condition. In the seven cases above there appeared to be additional objective factors to justify the feelings of desperation.

There were ten cases of mental illness. Again it is obvious that mental illness could be a factor in all cases of suicide. In fact there were many of those who committed suicide who were in fact treated for depression - often as a consequence of previous suicide attempts. So the ten cases categorised as "mental illness" were only those in which there could be no question:-

1. A woman of 42, psychotic, took drugs, was alcoholic and sick. Said she could not bear it and wanted to leave the family - before she took an overdose.

2. A man of 53 with a long history of mental illness. He hanged himself.

3. Paranoic schizophrenic of 26. A single man who was an invalid pensioner due to head injuries received in an accident.

4. A woman of 49 who drowned herself. She had a long history of psychiatric disorder. She had tried to kill herself by taking an overdose of pills several times previously and had been treated at hospital.

5. A woman of 52 with a long history of mental illness. She had been treated for depression and had made several previous attempts on her life. She eventually succeeded by an overdose.

6. A woman of 35 who was a diagnosed schizophrenic. She also suffered with asthma. She had made 17 attempts on her life in 3½ years.

7. A patient at a mental hospital - a man of 27 who took an overdose of pills whilst on week-end leave from the hospital. He was a diagnosed schizophrenic who had made at least one serious attempt previously on his life.

8. A man of 49 with a family history of psychiatric disorder. He was unemployed, hallucinated and had a fear of losing his de facto wife. He had been taken to hospital by her when he was in the habit of walking around (outside) naked at night. He shot himself.

The other two cases classified as "mental illness" are rather more questionable:-

9. A woman of 53 who hanged herself was said to have been under treatment for depression. She had made three previous attempts during the past five months. Here the "depression" could have been a label attached to previous attempts.

10. A woman of 57 who was said to have a "mental condition" and who before she took an overdose left a note saying "I couldn't take anymore."

It will be seen that the above could well have been regarded as "no sufficient reason" or "desperation". But the mental illness seemed to be conclusive for classification.

Age and pain, age and the loss of a spouse, age and incompetence were all very much in evidence. Reference has already been made to the man of 68 who had been living alone and looking after himself but who feared his own creeping incompetence and possible removal to an institution. So he took an overdose leaving a note apologising for the inconvenience. This may be regarded as a logical solution to his problem but of course it could have been regarded as "desperation". The act of suicide was so apparently calm, cool and well considered that it did not seem to have the wild frenzy and sense of being cornered which was used to identify those labelled "desperation".

The two cases where the loss of a spouse, combined with the sense of aging gave rise to suicide are really quite clear.

1. A woman of 51 had been depressed since her husband died two years before. This was the woman who drowned herself leaving her family the almost cheerful note "Gone to jump in the lake - Mum".

One may speculate on whether this note is exactly what it seems or whether there were times when in family arguments she had been told to "go jump in the lake". But to be fair it must be said that there is absolutely no evidence of such quarrels or remarks.

2. A man of 78 hanged himself several months after his wife died - having been distressed for that time about her death.

The group of cases classified as "Age/Pain" will be readily understood. Pain which might be tolerated when a person is young and virile will seem all the more insupportable with advancing age. The rationale for putting up with pain as one nears death anyway, may not be very clear. The nine cases were as follows:-

1. A man of 66 who was married stabbed himself. He had threatened when in pain to "cut" his "bloody throat". He was alive when found but said he had done it because he could not stand the pain any more. He had spinal trouble getting worse as he got older. He also had heart and bowel ailments.

2. A woman of 78 hanged herself whilst a patient at a convalescent hospital. She had been worried about advancing Parkinson's disease and she had twice before sought to take her life by an overdose.

3. An Italian migrant of 67 who had been in and out of hospitals for 2-3 years and who was said to have "nervous trouble and stomach pains", shot herself.

4. A 74 year old man suffering from arthritis, Parkinsons Disease and Vascular disease who had had operations for kidney stones and prostate shot himself. He had mentioned suicide to avoid extreme pain.

5. A man of 74 whose wife of 76 was becoming incapable and losing her mind, worried about her having to be sent to an institution. He already had to do everything for her - dress her, wash her etc., and she sometimes did not know who he was. He therefore placed her in his car, attached a tube to the exhaust, then got in himself and they died together of carbon monoxide poisoning. He left careful instructions for their cremation and the disposal of their effects.

6. A man of 63 who had had a stroke and was troubled by his inability to read or drive shot himself. This case has already been mentioned above because of the way he overcame his disability in killing himself.

7. A married woman of 62 who had an extensive medical history of tuberculosis, hiatus hernia, migraine, mitral incompetence and cancer was also diagnosed as schizophrenic. She had made a previous attempt to take her own life six years before. Now she succeeded with an overdose. Whilst the schizophrenia would have qualified this case to be regarded as "mental illness" it hardly seemed, in view of the age and illnesses, that this person in committing suicide was too much out of touch with reality.

8. A married man of 54 had liver trouble and problems with his gall bladder. He was said to be depressed due to continued illness and pain and did not want to live anymore. He came home drunk, beat his wife so she left for the night. The next day he had been drinking but was not drunk. He often took his tablets with alcohol. But this time it was an overdose.

9. A woman of 70 cut her throat. She had had hospital treatment for depression and had tried previously to kill herself by taking an overdose.

It should be noted that in these Age/Pain cases only one is under 62 - and he was 54. His is the only case where the advancing age might not have been a powerful factor.

The case of tribal trouble has been described above - a man of 39 having to anticipate tribal trouble because of his extra-marital sex. Presumably this could have been classified as "desperation" but there is no evidence of this. His sister committed suicide as did a half brother and another half brother was murdered.

There was only one case where pain was the reason for suicide unconnected with age. This concerned a single man of 36, a labourer who was suffering from severe stomach pains. He had asked about getting a firearm to take his life because he could not stand the pain. When admitted to hospital he discharged himself after 24 hours. He made his own shot gun of water pipe, a steel rod and a spring - wandered off into the bush and shot himself in the head. He had 0.058% alcohol in his blood when he died.

There were eight cases of rejected love not one of which concerned a person over the age of 24. In the six cases of the rejection by girl friends the oldest was 24:-

1. An unemployed young man of 20 was in love with a 15 year old girl who apparantly preferred someone else. He asked her what she would do if this other person killed himself - and what she would do if he (the person who later killed himself) committed suicide. He got drunk (0.160 per cent alcohol in blood and 0.236 per cent in urine) and shot himself.

2. A divorced man of 24 who was working began going with a girl six weeks before his death. He wanted to marry her but she refused. He beat her across the face and sat outside her house in his car checking her movements. He was reputedly possessive and jealous. He threatened to kill her and himself saying if he could not have her no-one else would. He gassed himself with carbon monoxide.

3. A clerical officer of 19 met his girl friend via C,B radio : only four months before his death : and they found they lived in the same block of flats. She never agreed to go out with him but he waited for her and continually pestered her to go with him. She decided to leave the block of flats but he found her new address. One day he showed her he had cut his wrists but the cuts were superficial and she refused to be blackmailed. On the day of the suicide he had again said he would kill himself if she did not go out with him. However, she either had, or intended to become engaged to an older man. He gassed himself with carbon monoxide leaving a note saying "I cannot face life without your love". However, this note is the only one in the total of 100 cases where there is a verbal or written attempt to make the ones left behind feel guilty. This young man wrote to the effect that she would make the choice whether he should live or die, she would have his life on her hands.....

4. A young man of 21 shot himself when his girlfriend decided to break-off their relationship. But he told her "Don't worry, I was considering it even before I met you, since I broke up with K." So this may be a case of suicide after being twice rejected by girl friends.

5. A 23 year old bar steward, an ex-soldier, had moved in to live with his girl friend. He was a heavy drinker and their relationship deteriorated mainly because of his drinking. She had given him notice to leave. So he shot himself.

6. A young man of 18 was attached to a girl of 15 still at school. Afterwards the girl maintained that it was all very casual but he had made it clear that it was more than casual to him. He shot himself. His note showed why.

The two cases of a girl committing suicide after being rejected by a boy friend concerned a girl of 16 and another of 22. In the latter case the reasons might have been more extensive.

1. The girl of 16 had defied her parents to maintain the relationship with an 18 year old self-employed paver. It was a close relationship and they were intimate. Pressures built up and there were many arguments so that the boy decided to break off the relationship. She threatened to kill herself and did so by taking an overdose of doxepin.

2. A girl of 22 who was unemployed and who was said to be on drugs killed herself with an overdose after her boyfriend with whom she had a sexual relationship broke with her. Her family had also rejected her however, because of her lack of industry, slovenly ways and easy virtue (which she denied).

Attached to this last category of rejection by a boy friend, girl friend or lover is the case labelled "unrequited love". This was not easy to classify and "unrequited love" is not exactly confirmed by the facts. A girl of 18 had fallen in love with the husband of her friend. He had said he also loved her but not in the way she wanted - meaning presumably that he did not intend to leave his wife. The girl too was torn because she did not want to hurt her friend his wife. It was during this interchange of confidences in a hotel room that the girl and the married man she loved had sexual intercourse. The girl seemed happy though she had started the day very unhappily

because of trouble with her parents. Finally she said brightly that she had thought of a solution - she would shoot herself. This she did with her father's gun almost as soon as she got home.

Thus, this is a case of unrequited love in the sense that the girl who committed suicide did so because she could not have the kind of love and commitment she sought. Yet it is possible that, had the love she sought been forthcoming, she would still have been disturbed about the effect on the wife, her friend. Moreover, the troubles at home aggravated the situation. So this was a case which could not really be treated as "rejection by boy friend" and it might well have fitted the "desperation" category : but none of these would have reflected the true situation with the accuracy elicited by this more general discussion of the admittedly inappropraite label "unrequitted love."

The drug cases were difficult to classify in this way because other factors were involved. However, the following three cases seem to have drugs as a major reason for what happened.

1. A woman of 37, married with a family shot herself. She left a note saying: "I have ruined my life through taking too many tablets.....I cannot put you through the agony of watching me become a mental case." There was much more about her losing her power to concentrate and control of her limbs.

2. A man of 33 who had taken an overdose had received a letter from his parents saying "Leave those damn drugs alone". This could have also been classified as "no sufficient reason" for there was no confirmation of the letter and factors other than drugs could have been influential.

3. A 26 year old drug addict living apart from his wife was having trouble with his girl friend, there was a pending court case and he was under threat of deportation. He was said to have "busted" a chemists shop with another man presumably in search of drugs. Whether from that source or from elsewhere he obtained Phenol which he both drank and injected into his veins with a hypodermic needle. It was said that he had never mentioned suicide but that he did not seem to care about

living. Again it will be seen that this case might have been classified as "Desperation"

The case designated as "alcohol" was equally difficult to label. This was a man of 41, an alcoholic, divorced and apparantly unable to work. He had told his girl friend, with whom he was living, that his pain might drive him to suicide - he had attempted it on other occasions and as a result had been treated at the hospital for depression. The file does not make it clear what kind of pain he had however - otherwise this might have been classifiable as a case of suicide because of pain. We only read that he had fits (attributed to alcohol) suffered from "a lot of pain" and from "nerves". He had had a job 3 weeks before but it lasted 2 days. He was slow and was worried about it. He had another job and was due to start but wondered if he could.

Finally, the case shown as "Illness/Depression" was difficult to insert neatly into any of the other categories - though there were several which it will be seen could have been stretched to accommodate it. This was a 53 year old female divorcee who had had many troubles. She was said to have a chronic cough (whooping cough as a child) and to have had trouble with sinuses when she was younger (which presumably had continued). She had had a mastoidectomy, antrum washouts, polio, recurrent chest infections including pheumonia. For the past ten years she had also had Menieres disease (ears and balance). This last complaint caused her to spend days in bed and be unable to walk round the house without leaning on the walls. She lived with her daughter and had been greatly worried about selling her house and moving to a duplex. She felt this had been a great mistake. She had recently been up North to help her sister only to find that because of her own illness she could not do much and she had returned "tired, pale and distressed". Six weeks prior to the suicide her daughter, (for reasons the mother understood) had told her mother that she would be moving out of the duplex. The woman was worried therefore about "how she would cope on her own."

She finally took an overdose of barbiturates, leaving a very practical type of note disposing of home and car - and with enough money from the bank account to cover expenses. The last sentence read:

"I feel useless to everybody and just want to go to sleep and stay asleep".

This case could have been subsumed under the headings of "Desperation", 'Age/Incompetence" or "Age/Pain". It could also have justified a category for "Fear of being left Alone". None of these would have covered adequately the variety of elements which made up the suicide. The calmness of the note indicates no real "desperation" though it was there without frenzy. "Age/Incompetence" covers it almost : but does not account for the effect of the daughter's decision to go. Nor would the "Fear of being left Alone" be an adequate reflection of the effects of illness and depression about both self and circumstances.

COMPARISONS WITH PREVIOUS RESEARCH

This section is devoted to comparing the analysis of suicides in Western Australia during 1978 with previous research, particularly that undertaken by Burvill in 1970[10] and 1971[11]. Where appropriate, reference is also made to other studies which have produced findings capable of being compared with those from the present study.

In studying age-sex variations in suicide in Western Australia during the period 1901-1967, Burvill found that male rates in Western Australia were markedly higher than the Australian male rates till about 1930, but that since World War 11 had moved nearer the Australian level. This trend was continued since 1967, although during some years (e.g. 1971, 1975) the male suicide rate for Western Australia fluctuated markedly from the general trend experienced during 1963-1977.

With respect to age and sex specific suicide rates in Western Australia for the period 1958-1967, Burvill found that the rates rose steadily with age for males, peaking for the 80-84 years age groups, while female rates flattened out after the age of 45 years with a peak in the age group 60-64 years. A somewhat similar pattern has emerged from an analysis of

---

(10) Burvill, P.W. "Age-Sex Variations in Suicide in Western Australia 1901-1967", Medical Journal of Australia, 2, 24, December 12, 1970 : pp 1113-1116.

(11) Burvill , P.W. "Suicide in Western Australia 1967 : An Analysis of Coroners' Records," Australia and New Zealand Journal of Psychiatry, 5, 1971 : pp 37-44.

average annual suicide rates by age and sex during 1975-1977. For males, the suicide rate peaked for the 45-54 year age groups (31.1) and again for the 65+ year age group (30.9), while for females the 45-54 and 55-64 year age groups had the highest average annual rates (11.7 and 12.8 respectively).

During the same period (i.e. 1958-1967), Burvill found that for males who committed suicide 34 per cent were aged 15-39 years, 41 per cent 40-59 years and 25 per cent 60+ years. By 1977, this distribution had changed noticeably; during that year the proportion of males who committed suicide aged 15-39 years had increased to 51 per cent, while the proportions for the 40-59 and 60+ years age groups had both declined to 33 per cent and 16 per cent respectively. With respect to females, Burvill found that 31 per cent were aged 15-39 years, 43 per cent 40-59 years and 26 per cent 60+ years. Unpublished tabulations for 1977 reveal that 42 per cent of females who committed suicide in Western Australia during that year were aged 15-39 years, 48 per cent were aged 40-59 years and only 9 per cent were aged 60+ years. Given that the comparison is between the ten-year period 1958-67 and the single year 1977, it is still noteworthy that among both sexes the proportion of suicides committed by those aged 15-39 years increased, while the proportion for those aged 60+ years decreased.

Burvill also noted that during the period 1901-1967 there were marked differences between the sexes in method employed to commit suicide. Males favoured shooting, poisoning (both by solid and liquid substances and carbon monoxide) and hanging, while females tended to choose poisoning by solid or liquid substances, domestic gas poisoning and drowning as

means to kill themselves. Analysis of 1977 statistics generally reinforces these differences. During 1978, 29 per cent of males who committed suicide employed carbon monoxide poisoning, 22 per cent poisoning by solid or liquid substances, 19 per cent shooting and 17 per cent hanging, strangulation or suffocation. For females, 57 per cent chose poisoning by solid or liquid substances and 3 per cent drowning. It is significant that during 1977 and 1978 no females committed suicide by domestic gas poisoning (no doubt due largely to the decreasing availability of this alternative). While 12 per cent of females who committed suicide in 1977 used carbon monoxide poisoning, no females employed this method during 1978.

Burvill's analysis of suicides in Western Australia during 1967 readily lends itself to comparison with that detailed previously for 1978 as both employ records kept by the Crown Law Department of Western Australia. However, Burvill had access to past medical records of persons who committed suicide, this additional information not being available for the present study - except where referred to in the file.

During 1967 there were 114 suicides in Western Australia, 44 city and 26 country males and 31 city and 13 country females. Analysis of all cases for 1978 (100) revealed that there were 56 city and 22 country males and 15 city and 7 country females who killed themselves. Here "city" and "country" refer to the place of residence of the deceased immediately prior to suicide being committed.

Table 10 gives the percentage distribution of suicides by age, sex and marital status for the two years under consideration. It can be seen that in 1967, 15 per cent of persons who committed suicide were single males aged less than 39 years; in 1978 the figure was 25 per cent, an increase

66 per cent of the 1967 figure. Conversely 10 per cent of those who committed suicide in 1967 were married males aged 40-59 years, while in 1978, 13 per cent of all suicide were married males of this age group. In 1967, 12 per cent of suicides were married females aged 40-59 years, compared to 5 per cent in 1978. Some 6 per cent of suicides in 1967 were widowed, divorced or separated females aged 60+ years, but in 1978 only 2 per cent of persons who committed suicide were in this group.

With respect to sex amd marital status, Table 10 shows that the proportion of suicides who were single males increased from 22 per cent in 1967 to 30 per cent in 1978, while that for married males declined slightly from 26 per cent in 1967 to 27 per cent in 1978. Single females accounted for 4 per cent of all suicides in both years, but the proportion of suicides involving married females decreased greatly from 22 per cent in 1967 to only 8 per cent in 1978. Turning to age and sex of persons who committed suicide it can be seen that the proportion for males aged less than 39 years and 40-59 years both increased (27 per cent and 42 per cent for the former in 1967 and 1978 respectively, and 17 per cent and 25 per cent for the latter) while that for males aged 60+ years declined from 16 per cent in 1967 to 11 per cent in 1978. For females the proportions for all three age groups were considerably higher in 1967 than in 1978.

Table 11 gives the percentage distribution of suicides in Western Australia by sex, place of residence and method employed for 1967 and 1978. A higher proportion of city males and a lower proportion of country males and

TABLE 10

PERCENTAGE DISTRIBUTION OF SUICIDES BY AGE, SEX AND MARITAL STATUS.

WESTERN AUSTRALIA, 1967 and 1978

	1967						1978					
	Males			Females			Males			Females		
	< 39	40-59	60+	< 39	40-59	60+	< 39	40-59	60+	< 39	40-59	60+
Single	15	4	3	3	1	-	25	4	1	4	-	-
Married (including de facto) **	9	10	7	5	12	5	8	13	6	2	5	1
Widowed/Divorced Separated	3	3	6	2	4	6	8	6	3	-	6	2
Unknown	-	-	-	-	-	-	1	2	1	-	1	1
TOTAL*	27	17	16	10	17	11	42	25	11	6	12	4

Notes: * errors due to rounding
** for 1967 includes "de facto" classification; for 1978 includes persons living within de facto relationship for at least three years.

Source: Burvill, P.W. "Suicide in Western Australia 1967 : an analysis of Coroners' Records", Australian and New Zealand Journal of Psychiatry, 5, 1971 : p. 38
Western Australia. Crown Law Department. Unpublished records. 1978.

city females commit suicide by solid or liquid poisoning in 1978 as compared to 1967. The proportion of city males using carbon monoxide was twice as high in 1978 as it was in 1967 although the proportion of country males using this method increased from 1 per cent in 1967 to 9 per cent in 1978. For both sexes the proportions of city and country residents using hanging to commit suicide was essentially the same. However, the proportion for city males who killed themselves with firearms increased from 6 per cent in 1967 to 13 per cent in 1978, while for country males employing this method the proportion decreased from 10 per cent to 7 per cent. The small number of persons who used other methods to commit suicide makes comparisons between the two years under consideration difficult.

With respect to all persons who committed suicides in both years it is worthy to note that while the proportion who died by solid or liquid poisoning decreased from 36 per cent in 1967 to 29 per cent in 1978, that for suicide by non domestic gases (almost exclusively carbon monoxide) almost doubled from 13 per cent to 25 per cent in 1967 and 1978 respectively. The proportions of all suicides involving hanging or firearms and explosives were essentially the same during both years while the proportion of suicides by submersion (drowning) decreased from 7 per cent in 1967 to 3 per cent in 1978.

Burvill found that 16 of the 114 persons (14 per cent) who committed suicide in 1967 died in hospital, including 9 cases of death from the injection of solid or liquid substances 3 from the use of firearms, 2 from injuries caused by cutting

and piercing instruments and 2 others. In 1978 11 of the 100 persons (11 per cent) who committed suicide died in hospital, including 7 cases of solid or liquid poisoning, 2 from the use of firearms, 1 from injuries caused by cutting or piercing instruments and 1 other. In addition there were two cases in 1978 of males who hanged themselves while in prison and a third case involving a male who used the same method to commit suicide in a police cell. Burvill also identified some 28 persons in 1967 who left one or more suicide notes prior to killing themselves, this comprising approximately one-quarter of all persons who committed suicide. In 1978, 32 persons who committed suicide left such a note(s) including 8 females (36 per cent of all females) and 24 males (31 per cent of all males).

Among the 1967 suicides were 7 cases where suicidal intent was recognized by those in close contact plus two additional cases involving suicide threats that were not taken seriously by the spouse. From the less detailed information available on suicides in 1978 it was possible to identify 3 cases where verbal threats to commit suicide were made to family members or friends shortly before suicide was committed. Seven males (10 per cent) and 14 females (32 per cent) among the 1967 cases had made suicidal attempts in the past compared to 12 males (15 per cent) and 10 females (45 per cent) among those who committed suicide in 1978. In 6 of the 1978 cases the actual number of previous attempts was not specified in the available information. Excluding this group there were no cases of males with more than two previous attempts, but

TABLE 11

PERCENTAGE DISTRIBUTION OF SUICIDES BY SEX, PLACE OF RESIDENCE AND METHOD EMPLOYED. WESTERN AUSTRALIA 1967 and 1978

Method	1967				1978			
	Males		Females		Males		Females	
	City	Country	City	Country	City	Country***	City	Country***
Poisoning by solid or liquid substances	11	7	14	4	13	4	9	3
Poisoning by non-domestic gases (Carbon monoxide)	8	1	3	1	16	9	-	-
Hanging, strangulation and suffocation	7	3	2	3	8	2	3	2
Submersion (Drowning)	3	2	4	-	1	-	2	-
Firearms and Explosives	6	10	1	3	13**	7	1	1
Cutting and piercing instruments	1	1	1	1	2	-	-	1
Jumping from high places	2	-	2	-	2	-	-	-
Other and unspecified means	1	-	1	-	1	-	-	-
TOTAL*	39	24	28	12	56	22	15	7

Notes : * errors due to rounding
** includes one case involving person of unknown place of residence.
*** includes "urban" and "rural" place of residence classifications employed by the authors.

Source: Burvill, P.W., "Suicide in Western Australia 1967 : An Analysis of Coroners' Records" Australia and New Zealand Journal Psychiatry : 5, 1971 : p. 39. Western Australia. Crown Law Department. Unpublished records. Perth 1978.

among females there were 2 cases each involving 3 persons attempts and a further case involving a person who drowned herself after 5 known previous attempts.

As noted earlier Burvill found that illness contributed towards suicides in 29 per cent of all cases and in 47 per cent of cases involving persons aged 60 years or more. Analysis of the more limited data on the 1978 cases revealed that in no less than 17 per cent of all cases illness contributed towards suicide. 53 per cent of those aged 60 or more years who suicided suffered physical illness and pain. Thus while the proportion of all suicides where illness was identified as a contributory factor was lower in 1978 than in 1967, the proportion of aged persons who suffered illness and suicided increased slightly.

Edwards and Whitlock have undertaken detailed studies of suicide and attempted suicide in Brisbane[12] and a brief comparison with this research and the present study is made below. As the present study is concerned with actual, rather than attempted suicide, the following discussion is limited to these researchers' analysis of completed suicides which

---

(12) Edwards, J.E. and Whitlock, F.A. "Suicide and Attempted Suicide in Brisbane : 1" "Medical Journal of Australia", June 1, 1968 pp 932-938; "Suicide and Attempted Suicide in Brisbane : 2" Medical Journal of Australia, June 8, 1968 : pp 989-995.

occurred within the Brisbane metropolitan area during the twelve month period February 1965 to February 1966.

During the calendar year 1965, 162 suicides were recorded in Brisbane giving the city a suicide rate of 23.9 per 100,000 population, higher than both the rate for Queensland (18.8) and for Australia (14.8) during the same years. Edwards and Whitlock analyzed a total of 163 cases of suicide during the period of the study, including 86 males and 77 females.

The following figures compared the distribution of suicide by age and sex in Brisbane 1965/1966 and Western Australia in 1978.

	Brisbane 1965/1966			Western Australia 1978		
	Males	Females	Total	Males	Females	Total
less than 39 years	16	10	26	42	6	48
40-59 years	26	18	44	25	12	37
60+ years	10	18	28	11	4	15
Total	52	46	98	78	22	100

Besides the imbalance between the sexes the differences between the proportions of suicides for males aged less than 39 years (16 per cent in Brisbane and 42 per cent in Western Australia) and for females aged 60+ years (18 per cent in Brisbane and 4 per cent in Western Australia) are significant.

The percentage distribution of suicides in Brisbane and Western Australia by sex and marital status is as follows:

	Brisbane 1965/1966			Western Australia 1978		
	Males	Females	Total	Males	Females	Total
Single	14	6	20	30	4	34
Married	26	24	50	27	8	35
Separated/divorced widowed	12	17	29	17	8	25
Not known	1	-	1	4	2	6
Total	53	47	100	78	22	100

It can be seen that there are notable differences between the propositions for suicides committed by single males, married females and to a less extent, persons of both sexes in the separated/divorced/widowed category when the two studies are compared.

There are also noteworthy differences by sex in the distribution of methods employed to commit suicide as the following figures show:

	Brisbane 1965/1966			Western Australia 1978		
	Males	Females	Total	Males	Females	Total
Drugs and poisons	28	34	62	42	12	54
Carbon Monoxide poisoning	7	5	12	25	-	25
Violent methods	18	7	15	11	10	21
Total	53	46	99	78	22	100

The proportion of Brisbane suicides by males involving drugs and poisons (28 per cent) was considerably less than was the case of Western Australia (42 per cent) while the reverse occurred with respect to females who used such methods (34 per cent in Brisbane and 12 per cent in Western Australia).

Also noteworthy is the difference in the proportion of suicide committed by both males and females and, employing carbon monoxide poisoning. Some 12 per cent of the Brisbane suicides involved this method compared to 25 per cent in Western Australia, while for suicide by violent means the respective proportions were 15 per cent and 21 per cent.

A final study worthy of attention is that by Tomasic[13] who has analyzed records of suicides from the Sydney Coroners' Courts for the period 1972-1976. An average of 342 suicides per year were registered in Sydney during this period giving an average annual rate for this city of 12.0 per 100,000 population. Tomasic found the annual average number of male suicides was 216 and for females 126. The following figures compare the age distribution of suicides in Sydney during 1976 and Western Australia during 1978.

	Sydney 1976	Western Australia 1978
< 39 years	41	48
40-59 years	38	37
60+ years	21	15
Total	100	100

It can be seen that while the proportion of suicides involving persons aged less than 39 years was higher in Western Australia (41 per cent compared to 48 per cent), that for persons aged 60+ years was higher in Sydney (21 per cent compared to 15 per cent).

(13) Tomasic, R. "Suicide" in Seminar on Victimless Crime Sydney, February 24-27, 1977. Department of Services and New South Wales Department of the Attorney General and Justice, Sydney, 1977.

A comparison of the distribution of suicides by marital status in Sydney and Western Australia for 1976 and 1978 respectively shows the following:

	Sydney 1976	Western Australia 1978
Single	30	34
Married	41	35
Widowed/Divorced/ Separated	28	25
Not known	1	6
Total	100	100

The major differences to be noted are the higher proportion of suicides in Western Australia involving single persons as compared to the higher proportion of Sydney suicides involving married persons. Further, the smaller difference between the proportions of suicides involving single and widowed, divorced or separated persons in Sydney (30 per cent and 28 per cent) as compared with the Western Australian figures (34 per cent and 25 per cent) is apparent.

From comparisons made with previous research, both in Western Australia and other parts of the country, it is apparent that similarities between suicide in Western Australia and elsewhere (e.g. the consistently higher male suicide rates) outweigh the differences (e.g. in age and marital status distributions of suicides and in methods employed). Within Western Australia it has been shown that while some current patterns in suicide are consistent with those in the past (e.g. methods employed by members of both sexes) there have also been noteworthy changes (e.g. the increased proportion of suicides among young males and variations between city and country suicides by sex and methods employed).

DISCUSSION

Since this account of suicide in Western Australia is only part of a wider and deeper study aimed at providing patterns and possible explanations of suicide on a national and international scale it would be premature to draw conclusions on the basis of the Western Australian experience alone. It would be unwise to generalise anyway from such a limited number of cases, the information about which is necessarily incomplete. Anything which seems to emerge from the work in Western Australia will need to be compared with the information from other states inside and outside Australia.

Short of final conclusions, however, Western Australia itself should find small comfort in knowing that self-killing competes for fourth and fifth places in all the possible causes of death amongst the 15-24 year olds - or that it has a rate of suicide which (per 100,000 of population) exceeds that of Norway, New Zealand, Singapore, Iceland, the Netherlands, Scotland, England and Wales and, is in fact greater than that for twenty other countries whose suicide rates are known. The fact that Western Australia has the continent's third highest annual average suicide rate, its second highest road death rate and that there is a possible link between this and the State's high level of alcohol consumption should also be an impetus to further and more conclusive research in this area.

Some compensation will be found in the knowledge that Western Australia has by no means the highest suicide rate of the Australian continent. There were four other States above it in 1976 : there are also a good many countries with suicide rates higher than those of Western Australia, notably Denmark, Finland, Sweden, Hungary and West Germany. And the Western Australian rate of 11.2 per 100,000 recorded in 1977 is much lower than the 1963 figure of 16.1. Particularly intriguing is the unusual fall of the Western Australian suicide rate to 7.5 per 100,000 in 1975. As this is perhaps the lowest rate ever recorded in the 150 year history of the state, the circumstances surrounding it may be well worth further and more intensive study.

From this short account of the state's suicide a number of common patterns emerge - patterns already well known from other studies of suicide not only in Australia but in other parts of the world. More men than women commit suicide : the significance of suicide as a cause of death decreases with advancing age, but the absolute number of self killings is greater between 25-54 years of age : proportionately more women than men have recourse to solid or liquid poisons : more men than women use guns. Other quite familiar factors emerge which have been associated with suicide across the world - mental and physical illness, alcoholism, drugs and drug abuse, homicide and family or economic failure. In Western Australia as elsewhere however, the enigma remains that such problems are not a monopoly of those who commit suicide. More people afficted by them do not commit suicide than those who do. So what is it that impels or induces to suicide in one case where such troubles arise - but which does not lead to suicide in another and perhaps very similar case?

It is interesting to see some of the changes since Dr. Burvill was writing about nine years ago. As this is covered by a special chapter all that needs to be underlined here is the significant shift towards suicides becoming younger. From 30 per cent in 1958-67 the proportion of all suicides committed by the under 40's seems to have doubled. This is a development which needs further study and urgent preventative action. Disillusionment amongst the young people seems to be having more effect than in former years.

The consideration of the individual reasons for suicide in Western Australia underlines the need for much more complete medical and social investigations. Unfortunately, a suicide cannot be identified until he is successful and this makes it too late for the kind of personal study which would ideally be required to understand the interplay of personal and environmental factors. Yet it is obvious that we can never know enough about this uniquely, dreadfully, final decision which some make in the course of human existence. Some writers have argued that a person has to be mentally unbalanced to commit suicide because no rational, normal human being could possibly prefer non-existence to existence : this assumes a choice of non-existence to be alien to human nature.(14) Against such beliefs may be ranged the Freudian concept of man alternating between basic principles of pain and pleasure and underlying instincts of life (Eros) and death (Thanatos) and some of the variants of modern existantialism which have extolled the virtue of self assertion in such an act and made the absurdity of life a background for man's choice of existence(15) John Donne may be given credit for saying suicide was no sin and David Hume sought to show that it was no crime.(16)

---

(14) e.g. G.K. Chesterton "Orthodoxy" Doubleday & Co, (Image Books) : New York : 1959 edition p. 93 - distinguishes between hero's who die "for the sake of living" and suicides who die "for the sake of dying".
Caleb Fleming in 1773 called suicide "unnatural depraved impious and inhuman" (quoted in Jack P. Gibbs (ed) "Suicide" : Harper and Row : New York : 1968 p. 48

(15) Albert Camus "The Myth of Sisyphus" : Hamish Hamilton London 1946 : translated by Justin O'Brien.

(16) J.P. Gibbs "Suicide" : Harper and Row : New York 1968 p. 48.

Such arguments apart, it is clear that we do not have all the relevant facts for a full understanding of any one simple case of suicide : and our bureaucratic procedures to deal with suicide or the various dramatisations of such events in newspapers, journals, fiction or television documentaries, however comprehensively designed, are still only capable of partial coverage of a complicated and much more profound subject. The attempt made in this study to assign reasons for the suicides, has merely served to demonstrate once again the inadequacy of the data available and the need for a great deal more in order to approach an understanding of each individual case. It has shown the legal system for determining the cause of death to be more designed to classify than to understand. It has shown the way in which every question answered has raised more questions to ponder.

If it ever could be done there should be a thoroughgoing investigation of the total life history of each suicide, not only built up from official records but augmented by interviews with teachers, employers, relatives, friends and neighbours - and the complete file of reports interpreted by doctors and philosophers as well as social specialists would throw much needed light on a problem which is a serious as it is little understood. Perhaps the deeper the investigation of each individual case the more pronounced would become the appreciation that each separate suicide is really explainable only in terms peculiar to the individual case.

Yet, however separate and distinct each individual case may be the interplay of human nature and societal pressures is common so that patterns are discernible and have given rise to all kinds of approaches to suicide in general rather than to the more difficult problem of suicide in the individual case.

Of course there have been many clinical studies of both suicides and attempted suicides by psychiatrists and others in related professions. Freud advanced the theory of internalised aggression - apparently on very inadequate clinical data.(17) The act of suicide flowed from an earlier repressed desire to kill someone else. It arose from anger which when repressed caused depression which could result in suicide. It is not necessary to take the theory to such an extreme to appreciate that anger whether general or specific and whether derived from feelings of failure or feelings of victimisation may well become self-directed. Rado has added the notion of expiation to this so that the suicide may be punishing himself for supposed guilt.(18) On the other hand Hendin has warned that suicidal patients are more numerous than those with the presenting symptoms of depression on which much of the Freudian and Rado approach is predicated : he also observes that many depressed patients are not suicidal.(19) In his own studies of attempted suicide Hendin discovered one form of suicide as retaliatory abandonment i.e. persons abandoned relatiated by the act of suicide.(20) This would fit a number of cases in Western Australia where suicide followed rejection by boyfriends, girlfriends or family. But Hendin also found some moves particularly in dependent patients, towards death as a form of reunion or representing a

---

(17) Freud S. "Civilisation and its Discontents" : Hogarth Press : London : 1949.

(18) Rado S. "Psychodynamics of Depression from the Etiological Point of View" : Journal of Psychosomatic Medicine : 13 : 51-55; 1951

(19) Hendin, Hubert "The Psychodynamics of Suicide" : Journal of Nervous and Mental Disease Vol. 136 (March 1963) pp. 236-244

(20) Ibid.

rebirth with the act of suicide; or the decision to self-destroy providing a gratifying feeling of ultimate omnipotence. All these could be supposed to have applied to some of the Western Australian cases but a great deal more would need to be known before they could be assigned with any certainty.

It must be remembered that however profound the clinical studies of individual states of mind may be they are frequently selective in that an investigator is not immune from the possible accummulation of facts to prove or disprove theories with a consequent possible neglect of other significant conditions. Moreover clinical studies of mental states are not always independently corroborated by social background investigations, or given the necessary perspective of a study of the minds of those in closest touch with the patient. Sometimes the circumstances will be constructed from the patient or one or two friends or relatives who come with him when an independent factual study of the situation could give a different angle. Obviously it is the patient's understanding of the world about him which concerns the practitioner - perhaps much more than the real world. But for a total understanding of the suicide both the subjective and objective conditions are needed. So there is always a dimension lacking in any attempt to present a suicide case which makes it difficult to be absolutely certain of the so called patterns. A medical report may be insufficiently broad from the social angle : a social report may be no less selective and lacking in appreciation of neurological, physical or psychological perspectives; the legal procedure is designed to answer quite limited questions for its own purposes; and family or relatives' accounts may obviously be biassed or intended to cloak anything possibly discreditable.

Looking beyond the individual cases however, it is quite remarkable that on the basis of past figures it is possible to forecast fairly accurately the number of suicides from year to year. There are some exceptions to this as has been shown in Western Australia but the consistencies outweigh the inconsistencies. So, even if it is not possible to say who will commit suicide next year in Western Australia it is predictable that about 100-120 people will do so. Why should the pattern be so regular - and why should the differences from other countries continue to be so consistent?

Such considerations have led to the idea that there are possible explanations for aggregate suicides across the world and over the years - even though the knowledge of personal histories and individual motivation is still incomplete - and seems likely to remain so. It was Emile Durkheim who set the pattern for the sociological investigation of suicide in the early 19th century and whose brilliant sociological treatment of the limited and unreliable data has made this approach to suicide so popular in sociological literature.

Durkheim's "Suicide" was first published in 1897. He looked at the suicide rates of different countries and communities. He postulated that suicide:-

1. varies inversely with the degree of integration of religious society;
2. varies inversely with the degree of integration of domestic society;
3. varies inversely with the degree of integration of political society.

So, low integration means a high suicide rate and vice versa : but what is social integration and how is it measured? The fact that there were more suicides amongst Protestants than Catholics he attributed to this difference of social integration or sense of belonging and it is significant

that in war-time when communities unite for defence the rate of suicide declines. However, there are some notable exceptions (e.g. a high rate of suicide in Catholic Austria or the "expected" suicides of old people in small integrated tribal societies). On a purely intuitive basis, however it is possible to apply Durkheim's theory to the Western Australian situation. Thus it could be argued that society has failed its old and sick members when so many, in this condition, find it preferable to commit suicide : there is a lack of the social cohesion which would help them to still feel a sense of belonging. It is paradoxical that in a few cases the decision to commit suicide was instigated by a fear of institutionalisation: thus old people do not wish to be shut away : integration by living with others equally unfortunate is presumably regarded as rejection i.e. the opposite of integration. Domestic integration was obviously important in a number of cases where the loss of a partner, the breaking of a home or rejection of loved one resulted in suicide. However, the extent to which religious integration was operative could not be assessed because the religion of the suicides was not recorded. It would have been instructive to have been able to divide the suicides according to ethnic grouping : this would have demonstrated the influence (or lack of it) of differential social integration better than anything else. But the relevant information was not available on the 1978 cases.

In general, does Western Australia have a fairly high suicide rate because it is so urbanised and thereby lacking in the kind of community cohesion that prevents suicide? Is it this alienation which accounts for the higher proportion of young people committing suicide. Could it be a sense of rejection increased by unemployment? A study of the cases clearly shows that the unemployment accompanied by financial problems and difficulties at home combined to induce suicide in some of the cases. However, it must always be remembered that there were many others exposed to the same pressures who did not take their own lives.

A variant of Durkheim's theory of social integration was Halbwack's concept of social isolation which he saw most noticable in urban areas. This too lends itself to application to many of the Western Australian cases - particularly if advancing years be held to increase the feeling of social isolation - or if rejection in love or from the family be considered in terms of social isolation.(21)

In the United States two writers combined their efforts after the Second World War on a study of homicide and suicide. Henry and Short argued:

> "As acts of aggression, suicide and homicide cannot be differentiated with respect to the source of frustration generating the aggression. Both respond in a consistent way to frustrations generated by economic forces."(22)

They suggested that the suicide rate of a population would vary inversely with the degree of external restraint placed on the behaviour of the people. This would lead to frustration with an outlet in aggressive behaviour to others or to oneself. They added that suicide would also vary with status presumably because people of higher status are subjected to less external restraints or economic problems. Like Durkheim they faced the problem of measurement. How does one measure external restraint? Hungary and Sweden have high suicide rates but by any measure they are subjected to very different types and degrees of external restraint. How much external restraint is there in Western Australia? To what extent does this account for the suicides and murders? The attempt made in this study

---

(21) Maurice Halbwachs "Les causes du Suicide" Paris : Alcan 1930

(22) Andrew F. Henry and James F. Short Jr. "Suicide and Homicide" New York : The Free Press : 1954 : p. 15

to test the Henry and Short theory of a link between murder and suicide was not too rewarding.

The possible association of suicide in Western Australia with road traffic deaths and alcohol consumption rates was considered but the results were suggestive only. It was clear that further and more profound study would be required before more than the present very tentative conclusions could be drawn.

One of the latest and most sophisticated attempts to explain suicide is that of Gibbs and Martin[23]. This attempts to measure the Durkheim idea that suicide fluctuates with the quality of social relationships. For Gibbs and Martin such role conflicts are functions of status integration in a population so that the higher the status integration the less the suicides. If one reads "Social integration" for "Status Integration" it is at once clear that Gibbs and Martin are in fact providing the elucidation and measurement technique which was lacking in the Durkheim treatment. Whatever the value of this measure it did not fit the picture in Western Australia when this was tested for the years used by Gibbs and Martin for the elaboration of their method.

So what is left? For some time now the author has been working on the possibility that all suicides can be explained by a theory of expectations i.e. external expectations in the form of social pressures to fill assigned or assumed roles - and internal expectations in the sense of personal, subjective, feelings or concepts about what will, should or might happen. The above account of the theories is by no means exhaustive but it illustrates what many specialists in this field have been calling for - a theory capable of combining the social and psychological aspects of suicide.

---

(23) Jack P. Gibbs and Walter T. Martin. "Status Integration and Suicide" Eugene : University of Oregan Press, 1964.

What is still needed is a theory capable of bridging the gap between the sociological approaches to the aggregate problem of rates of suicide and the phychiatric and psychological problem of explaining individual cases. This is possible with a conceptualisation of the problem of suicide - individual and in general - in terms of expectations. One reason for this study of actual cases in Western Australia was to see if there were cases which could not be explained in terms of social or psychological expectations.

If this concept of expectations be construed widely to incorporate not only the Gibbs and Martin idea of external pressures i.e. social demands on individuals but also the expectations of the suicides themselves, then it can be confidently asserted that all suicides including those in Western Australia can be explained by expectations. People kill themselves either because they have no real expectations left in this life or perhaps a great many in the after-life - or they kill themselves when they have failed to meet the expectations of society. There is not a single individual case in this study which cannot be explained as a failure to meet social expectations - or as a failure of hope. i.e. their own expectations. This has implications for education, the media or other processes in society which may unwittingly raise expectations beyond achievable levels and so contribute to the frustrations and dissatisfactions when either the person's own or his family or peer group expectations cannot be met. Moreover this same construct of expectations fits mass suicides, self-sacrificing suicides, imitative suicides and many others which do not have relevance for the Western Australian study. Nevertheless the Western Australian cases demonstrate that a theory of expectations, as applied to suicide, fits the experience in that State. It now needs to be tested nationally and internationally.

BIBLIOGRAPHY

Burvill, P.W. "Age-Sex Variations in Suicide in Western Australia 1901-1967", Medical Journal of Australia December 12, 1970 : pp 1113-1116

Burvill, P.W. "Suicide in WEstern Australia 1967 : An Analysis of Coroner's Records", Australia and New Zealand Journal of Psychiatry, 5, 1971 : pp 37-44.

Camus, A. The Myth of Sisyphus, London, Hamish Hamilton, 1946 (translated by J. O'Brien)

Chesterton, G.K. Orthodoxy. New York, Doubleday & Co., 1959

Cunningham-Dax, E. "Suicide in Today's Society", Medical Journal of Australia 2, 1968 : pp 1197-1200.

Edwards, J.E. and Whitlock, F.A. "Suicide and Attempted Suicide in Brisbane : 1", Medical Journal of Australia June 1, 1968 : pp 932-938.

Edwards, J.E. and Whitlock, F.A. "Suicide and Attempted Suicide in Brisbane : 2", Medical Journal of Australia June 8, 1968 : pp 989-995.

Freud, S. Civilization and its Discontents, London, Hogarth Press, 1949.

Gibbs, J.P. Suicide, New York, Harper and Row, 1968

Gibbs, J.P. and Martin, W.T. Status Integration and Suicide Euregene, Oregon, University of Oregon Press, 1964.

Halbwachs, M Le Causes du Suicide, Paris. Alcan. 1930

Henry, A.C. and Short, J.F. Suicide and Homicide, Glencoe, Illinois, Free Press, 1954.

Hendin, H. "The Psychodynamics of Suicide", Journal of Nervous and Mental Disease, Vol. 136, March 1963 : pp 236-244

Rado, S. "Psychodynamics of Depression from the Etiological Point of View", Journal of Psychosomatic Medicine, 13, 1951 : pp 51-55.

Stengel, E. Suicide and Attempted Suicide, Harmondsworth Middlesex, Penguin Books, 1964.

Tomasic, R. "Suicide" in Seminar on Victimless Crime, Sydney, February 24-27, 1977, Department of Services and New South Wales Department of the Attorney General and Justice, Sydney, 1977

Whitlock, F.A. "Suicide, Culture and Society" in I. Pilowski(ed), Cultures in Collision, Adelaide. Australian National Association for Mental Health, 1975 : pp 384-387.