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SUICIDE IN AUSTRALIA: A SOCIOLOGICAL STUDY

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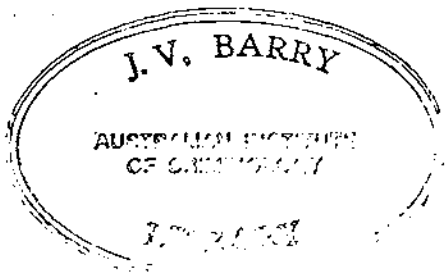

SUICIDE IN AUSTRALIA: A SOCIOLOGICAL STUDY

This book provides a general overview of suicide in Australia by focusing on a number of key social factors. Its aim is not to minimize the importance of psychogenic factors in suicide but to highlight its sociological aspects. Besides providing an introduction to the sociology of suicide the first three chapters analyze suicide trends in Australia and the social and economic factors associated with the fluctuation in the suicide rates over the past one hundred years. Special attention is paid to the role of economic, social and demographic factors which have elevated suicide rates in two theatres of life: the very young and the aged. The next five chapters examine the mediating role of work, family, occupation, gender, age, temporal cycle, seasons, immigration and ethnicity in suicidal behaviour in Australia. The last three chapters examine and explore in detail the etiological framework for explaining suicidal behaviour as well as the stability and change in methods of suicide. The book provides a synthesis of the existing studies of suicide and new and original evidence on the relationship between suicide and social factors. It is argued that study of suicide is an instructive way of understanding the social organization of death and dying in contemporary Australian society. The empirical evidence presented in the book shows that suicidal behaviour like other forms of social behaviour has important symbolic content and in the final analysis it is shaped by the same social forces which influence and regulate the other general patterns of social life in society. In other words all the reasons which are good enough to live for are also good enough to die for. It is the first systematic sociological study of suicide in Australia. It should be of interest to university students and academics in the fields of sociology, psychology, medicine, law and social work. It can be used as a textbook in specialized university courses in these fields. Its contents should also be of interest to police, legal professionals, teachers and members of welfare professions. It is written in a manner to make its contents accessible to members of the general public who are interested in the subject and would like to expand and deepen their understanding of the problem of suicide which now claims one life every four hours in Australia.

THE AUTHOR

Riaz Hassan is the Professor of Sociology at the Flinders University in Adelaide. He holds a PhD in sociology from the Ohio State University. He has researched extensively on suicide and suicidal behaviour and published his findings in national and international journals. His publications on the subject include the following: *A Way of Dying: Suicide in Singapore* (Oxford University Press, 1983); 'Suicide in Singapore: a sociological analysis', *European Journal of Sociology*, 1981; 'Changing patterns of suicide in Australia', *Australian and New Zealand Journal of Psychiatry*, 1989 (with J. Carr); 'Suicide trends in Australia 1900-1985: an analysis of sex differentials', *Suicide and Life-Threatening Behaviour*, 1989 (with G. Tan); 'Women's emancipation and suicide in Australia', *Australian and New Zealand Journal of Sociology*, 1992 (with G. Tan); 'Lives unlived: youth suicide in Australia', *Criminology Australia*, 1990. He has also authored several books and articles on other topics in sociology. He lives in Adelaide with his wife and two children.

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To my parents

and

Dato (Dr) S. Arulampalam

PREFACE

Suicide is a major public health and social problem in Australia. In 1990 it claimed one life every four hours. According to the existing estimate there are as many as ten para-suicides for every suicide. Unfortunately, both as a public health issue and as a social problem it does not attract the attention of public authorities its seriousness clearly warrants. As a social problem it also raises some important theoretical questions about the nature of the relationship between the individual, society and social conditions. The weight of existing sociological evidence suggests that changes in this relationship are inextricably related to the incidence of suicide in society.

I hope this book will increase the public awareness of suicide as a public health problem as well as provide an insight into the way social conditions affect the suicide rate to the students of sociology, law, psychology and medicine. Its contents could also guide formulation of public policy for its prevention and management and may also be of interest to members of the general public who are interested in the subject. Since I began research for this book in 1986 several people have given valuable assistance at various stages. I would like to acknowledge the assistance of Mr John Honeyben, Dr Joan Carr, Ms Deb Hodson, Mr Scott Baum and Ms Margie Syme-Hann. Ms Helen Patience and Dr Christine Stevens read drafts of some of the chapters and made useful comments on them.

The research for this book was funded primarily by a grant from the Criminology Research Council for which I am most grateful. I am also deeply indebted to the State Coroner of South Australia for permission to examine Court records and to the Court staff for their assistance and cooperation over the years. Ms Sue Manser was responsible for typing various drafts of this manuscript including the final draft. I would like to express my deep appreciation and thanks for her skilful, able and uncomplaining labour at the word processor. I am grateful to my family for their help and support. There are other colleagues and friends who are not mentioned here by name but I hope they know the extent of my gratitude to them for their support over the years.

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CHAPTER I

THE PROBLEM OF SUICIDE

We live by avoiding death. But, for reasons which have confounded thoughtful men and women since time immemorial, a small though significant number of people in all ages and in all human societies, have managed to escape from the obsession of living and by their own volition have deliberately embraced death. In Australia about 2,000 people take their own lives each year. In the 100 years to 1990, a total of over 98,000 people committed suicide. That many people living together in one place would comprise the fourteenth largest city of Australia, larger than Townsville.

Suicide is ultimately a deadly violence directed against self. As a form of death it has evoked and evokes a multiplicity of reactions from the living, ranging from sadness and fascination to repulsion and condemnation. Much has been written about suicide motivation and the nature of the act by philosophers and theologians through the ages. It has especially fascinated social scientists for two reasons: firstly because of its universality and secondly, because of its very nature and definition, suicide constitutes a form of deviant behaviour. Both of these reasons make suicide an important and major object of social inquiry.

In the eighteenth century the social meaning and perception of suicide was largely shaped by religion, and it was regarded as a moral problem, but since the beginning of the nineteenth century it has come to be regarded as a social problem requiring explanation. The French sociologist, Emile Durkheim, was the first social scientist to pierce through the moral indignations and philosophical defences surrounding suicide, thus pioneering systematic and scientific research on the subject. His work constituted an attempt at a theoretical synthesis of the many earlier ideas and findings concerning suicide as

a social phenomena.[1] He was followed by Sigmund Freud who further enhanced the scope of scientific investigation by introducing the techniques of newly founded psychoanalysis to the study of suicide. Their works have served as a spring-board for numerous studies by generations of social scientists who followed them.

Any discussion which seeks to add to the sociological dynamics and meaning of suicide, therefore, must begin with a review of Durkheim's and Freud's pioneering work.

Sociological Analysis of Suicide

In his book, Suicide: A Study in Sociology, which appeared in 1897, Durkheim set about systematically discounting popular non-sociological explanations of suicide.[2] By using official statistics on suicide from various European countries, including his native France, he demonstrated that the incidence of suicide in a society was associated with the degree of social integration and not with race, heredity, cosmic and psychological factors. He viewed suicide and birth rate as socially related phenomena and asserted that the high and rising suicide rate and the low and falling birth rate in the society were both to be attributed to the increasingly alienated and egoistic nature of the 'social milieu'.[3]

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1. By the end of the nineteenth century statistical and interpretative work on causes and variations in the suicide rate multiplied in various West European countries especially in France, Germany and Italy. A number of statistical correlations were established and hypotheses advanced relating suicide rates to occupation, urbanization, religion and the rate of social change, heredity, race, climate and mental disorder. The rise in the suicide rate (in France, England, Germany, Italy, etc.) was generally attributed to the passing of the traditional social order and the growth of industrialization. See Steven Lukes 1973, *Emile Durkheim*, Penguin Books, p. 192; a useful historical discussion of suicide can be found in Crocker, L.G. 1952, 'The discussion of suicide in the eighteenth century', *Journal of the History of Ideas*, 13, pp. 47-52, and David Daube 1972, 'The linguistics of suicide' *Philosophy and Public Affairs*, 1, 4.
2. Durkheim, Emile 1966, *Suicide: A Study in Sociology*, Spaulding, John A. (trans.) with an introduction by George Simpson, ed., The Free Press, New York.
3. Discussion of the relationship between birth rate and suicide are summarized in Steven Lukes, op. cit., pp. 193-5.

Durkheim brought together a number of preliminary insights to identify the areas and growing points of social dissolution in contemporary societies, putting these within the general theoretical framework which stated that: 'suicide varies inversely with the degree of social integration of the social group of which the individual forms a part'.[4] Durkheim's concept of integration is rather vague, lacking in concise theoretical definition, but as a general rule it refers to the strength of the individual's ties to society and the stability of social relations within that society.[5]

Whilst recognizing the significance of a wide variety of psychological causes at the individual level such as apathy, melancholy, anger and weariness, Durkheim was emphatic that individual explanations cannot explain the variations in and within suicide which he regarded as the proper object of sociological analysis. The suicide rate, he argued,

> constitutes a single and determinate order of facts - as is shown both by its permanence and its variability. For that permanence would be inexplicable if it were not related to a cluster of distinct characteristics, associated with one another and simultaneously effective despite different attendant circumstances; and the variability proves the concrete and individual nature of those same characteristics since they vary with the society's individual character. In short what these statistical data express is the tendency to suicide with which each society is afflicted (1897, p. 51).

His approach was determined by his conceptualization of suicide, which he defined as 'all cases of death resulting directly or indirectly from a positive or

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4. Durkheim, op. cit., p. 209.
5. His notion of social integration was related to the prevailing notions of individualism which was seen as a threat to the 'social order' of France. Individualism was viewed generally as an apathetic withdrawal of individuals from public life into a private sphere and their isolation from one another, with a consequent and dangerous weakening of social bonds. In the nineteenth century the French thought individualism was often equated with incipient social dissolution. But Durkheim sought to explain individualism as resulting from a new set of values which had become institutionalized in modern societies, rendering the individual sacred, attaching moral value to individual autonomy and justifying individual freedom and rights. Unlike his many contemporary social thinkers Durkheim thought that it was possible to find a remedy to the dissolution of social bonds within a social context shaped by liberal and humane values. See Lukes, op. cit., pp. 198-9.

negative act of the victim himself which he knows will produce this result';[6] in short, the defining feature of suicide was the conscious renunciation of existence. The focus of sociological analysis was to determine the cause of the phenomenon and once causes were known one could then deduce from them the nature of the effects; namely individual suicides which 'will thus be both characterized and classified merely by being attributed to their respective sources'.[7]

In other words the starting point for Durkheim was in fact a Causal Social Theory which he assumed to be true. He sought to verify this theory by establishing that suicide rates vary as a function of several social environments, such as religious, family, political society, professional group, etc. For him, individual suicide merely represented an echo of the moral state of society.[8]

He believed in the existence of a 'collective force' which exerted pressure on individual members of society and it was this collective force which determined the rate of voluntary death. Each social group possessed a 'collective inclination' for the act of suicide which became the source of all individual inclination.[9]

Durkheim's Typology of Suicide

Durkheim isolated three main aetiological types of suicide - egoistic, altruistic and anomic - which resulted from this 'collective inclination'. Altruism, egoism and anomie in fact represent different measures of the degree of integration in society; this social integration can be characterized by a number of factors such as the number, frequency, type and degree of intimacy involved in social relations and interaction.

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6. Durkheim, op. cit., p. 44.
7. ibid., pp. 201-2.
8. Lukes, op. cit., pp. 201-2.
9. Durkheim, op. cit., p. 299.

Altruistic Suicide

Altruistic suicide occurs when an individual so completely identifies with the group that its goals and its identity become his, and consequently the individual has no autonomous existence separate from the group to which he belongs. The group-tribe, nation or religion has such 'massive cohesion' that each member is willing to sacrifice his life for the sake of his beliefs or the honour or survival of the group.

Durkheim thought that altruistic suicide occurred more frequently in relatively small, tribal and primitive societies. In modern societies altruistic suicide occurs in more rigidly organized groups or social organizations like the Army. For example, a member of the armed forces who sacrifices his own life in order to save his comrade may be deemed to have committed altruistic suicide. However, more detailed studies of this type of suicide in modern armed forces show that given the rigid discipline, sense of loyalty and obedience, there is a strong tendency for persons to accept suicide in order to escape from what they perceive to be unbearable personal situations in which they have to conform to the strict laws, norms and procedures of the Army.[10]

Other examples of altruistic suicide are the Japanese seppuku tradition and Sati in Hindu society. The latter refers to the practice of voluntary self immolation for religious purposes of women upon the death of their husbands. Seppuku tradition still remains an idealized behaviour among the more 'nationalist' Japanese. Two most famous examples of seppuku recorded in this century have been that of General Nogi, the hero of the Russo-Japanese War, and Jukio Mishima, the much acclaimed Japanese writer and political activist of the 1960s. On the death of the Emperor Meiji in 1912, the patriot Nogi and his wife followed their master to the grave by performing seppuku. Yukio Mishima, himself a descendant from an old Samurai family, scorned Japan's headlong

10. J.G. O'Gorman, et al. 1975, 'Suicidal behaviour in the Australian army', *Australian Psychologist*, 10, p. 1.

adoption of Western ways and its loss of imperial tradition, openly denouncing his country as 'effeminate' and 'a nation of flower arrangers'. In November 1970, Mishima after a foolhardy attempt to incite an uprising at the Self-Defence Forces headquarters in Tokyo committed seppuku.

Nowadays the act of seppuku is viewed by many Japanese as brutal and anachronistic, but it still lingers in many Japanese minds as an acceptable recourse to shame and loss of face. The accounts of suicide by unsuccessful schoolchildren are examples of this consciousness. In August 1980, the captain of a Japanese cargo ship Fuji Maru committed suicide because two days after the ship left Japan the ballast tanks of the ship ruptured, pouring tons of water into the hold damaging two hundred automobiles. Captain Takuya Sakai believed that because of this incident he had disgraced himself beyond redemption and some time between 3.30 a.m. and 6.15 a.m. on 28 August, after the ship had docked in the port of Los Angeles, he committed suicide. In the suicide note he left he wrote, 'I have exposed the precious lives of the crew and the load to danger. I have neglected my job twofold and threefold, I have been worthless ...' He stamped the suicide note at its conclusion with the Captain's seal.[11]

The nature of altruistic suicide has been summed up by Albert Camus in a parenthesis: 'What is called a reason for living is also an excellent reason for dying'.

Egoistic Suicide

Egoistic suicide occurs when the individual is not properly integrated into society and has to rely on his own resources, which results in excessive individualism. For example Protestantism with its emphasis on individual interpretation of free will and grace accommodates suicide, whereas Catholicism which insists on a greater conformity to its rituals and doctrines involves its

11. Eddit Iwata and Masakazy Iwata 1980, 'Seppuku: more than an anachronism' *Japan Times*, 1 October.

adherents in a directed and thus circumscribed, collective religious life. Statistical evidence produced by Durkheim supported his claim that Protestant regions experienced higher suicide rates than Catholic countries in Western Europe. Durkheim does not advocate that it is religion per se that inclines people towards suicide, rather it is the degree of integration which religion produces - it is the power which is exerted upon individuals through shared beliefs and a sense of 'belonging'.

Similarly the traditional family life with several generations living intensely under one roof, protected each member from his impulses to self-destruction, whereas the modern nuclear family with children scattered or parents divorced encourages these impulses. Furthermore, married persons generally enjoy greater immunity from suicide than those who are not married, because of the strong collective sentiments which prevail in married and family life. Political life also affects the rate of suicide in society. Political upheavals such as wars, revolutions, election crises, etc., excite passions and reduce suicide rates. This is due to a temporary increase in the overall degree of social integration and to an increase in individual participation in social life.

Generally, it is when the degree of social integration is weakest, when individuals detach themselves from social life, that the suicide rate increases.

> The more weakened the group to which he belongs, the less he depends on them, the more he consequently depends only on himself and recognizes no other rules of conduct than what are founded on his private interests. If we agree to call this state egoism, in which the individual ego asserts itself to excess in the face of the social ego and at its expense, we may call egoistic the special type of suicide springing from excessive individualism.[12]

12. Gorman et al., op. cit., p. 209.

In short, an egoistic suicide would occur because the individual is not socially adjusted; he is like the protagonist in La Nausee by Sartre, a man with few social ties, all alone in his loneliness.[13]

Anomic Suicide

Unlike egoistic and altruistic suicides which are related to the degree to which an individual is integrated with his society, anomic suicide is the result of a sudden and unexpected change in a person's social position creating a new situation with which he is unable to cope. For example, in sudden economic crises, stock market crashes, business failures or a big lottery win - when society is momentarily incapable of exercising control over individual passions, suicide rates increase.

In an economic crisis which adversely affects an individual he may experience downward social mobility. In contemporary societies unemployment and even increasing inflation are probably the two most ubiquitous examples of economic crises. Under conditions of inflation (which have become an almost permanent feature of contemporary capitalist societies) one can say that as the cost of living goes up life becomes cheaper. An individual affected by economic crisis may lose his or her social prestige and influence and be suddenly forced to exist at a lower standard of living. In such circumstances

> ... a kind of declassement occurs, suddenly thrusting certain individuals into a situation inferior to the one they occupied hitherto. They must therefore lower their demands, restrain their wants, learn greater self-control ... they are not adjusted to the condition imposed on them and find its very prospect intolerable;

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13. Perhaps the more recent example of egoistic inclination in the Durkheimian sense can be drawn from the life of the great English comedian-actor, Peter Sellers, who lived most of his adult life unhappily, while entrancing millions with his brilliant imitations of life. When on 24 July 1980 he died at the age of 54 years he was described as a 'melancholy clown'. According to one observer, 'He was never certain that his day-to-day existence amounted to anything at all, despite his fame, his homes on two continents, his private jet, his yacht and his over five million dollars fortune.' According to his fourth and last wife, 'His mind is in a constant state of turmoil about what his purpose is on this planet and whether it's all worthwhile'. The state of his mind and life at the time of death was even more graphically described by one writer of his obituary, 'Sellers stood alone in more ways than one'.

> thus they experience sufferings which detach them from a reduced existence even before they have tried it.[14]

Similarly, an individual who experiences a dramatic increase in wealth may also experience a lack of social regulations, with the consequent result that there is no restraint upon individual aspirations and so a state of deregulation or anomie exists.

In Durkheim's view social conditions in contemporary industrialized societies were highly conducive to economic anomie which was 'a regular and specific factor in suicide in our modern societies'[15] resulting from religious, political and occupational controls, the growth of ideologies sanctifying industrial progress for its own sake and the 'very development of industry and the almost infinite extension of the market'.[16]

Durkheim also identified a fourth type, fatalistic suicide, which he argued was the converse of anomic suicide and was characterized by excessive regulation. The individual feels that he/she has no personal control or freedom and perceives the future either relentlessly blocked and passions violently repressed by unavoidable and inflexible rules over which he/she felt powerless.[17]

However, it is not only economic anomie that may lead to suicide. Other anomie-producing situations such as widowhood (domestic anomie) and divorce (conjugal anomie) also contribute to suicide, particularly among men, as it is the man who has benefited most from the regulative influence of marriage. Durkheim also discusses the possibility of combinations of the various types of suicides. For example, it is possible to categorize a suicide ego-anomie or anomic-altruistic.

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14. Durkheim, *Suicide*, quoted in Lukes, op. cit., p. 210.
15. ibid., p. 211.
16. ibid., p. 211.
17. Durkheim, op. cit., p. 276. Lukes, op. cit., p. 209.

Durkheim's theory of suicide in summary amounts to this: that under adverse social conditions, when individuals' social contexts fail to provide them with the requisite sources of attachment and/or regulation at the appropriate level of intensity, then psychological or moral health is impaired, and a certain number of vulnerable, suicide-prone individuals respond by committing suicide.

All in all the major contribution and effect of Durkheim's study was that it provided a new perspective to look at and understand suicide. Suicide was not an irredeemable moral crime but a fact of society, like the birth rate or rate of unemployment; it had social causes which were subject to discernible sociological laws which could be identified, discussed and analysed scientifically and rationally. Although the final structure of Durkheim's theory is somewhat confusing and at times unsystematic and inconsistent, his analysis of data is particularly illuminating and perceptive. The fundamental preoccupation of Durkheim throughout his work is the relationship between the individual and society. Durkheim took the act of suicide which was by definition an individual action and showed the sociological aspect of it.

After Durkheim, sociological studies of suicide have appeared with almost predictable regularity, most of which clearly reveal the impact of his pioneering study. Some of these studies have added significantly to the objectives which Durkheim had charted out for himself.

Following Durkheim's general theoretical orientation Halbwacks,[18] in a study published in 1930, found that suicide rates varied directly with the degree of social isolation (he substituted 'social isolation' for Durkheim's concepts of anomie and egoism), and that social isolation varied directly with the degree to which populations were urban. Consequently, he attempted to show that suicide rates tended to be higher in large cities (i.e. highly urbanized areas). But one of the major deficiencies of Halbwacks' theory was that whilst suicide rates vary

18. Halbwacks, Maurice 1930, *Les Causes de Suicide*, Alcan, Paris; a useful summary of Halbwacks' theory can be found in Martin, Walter T. 1968, 'Theories of variation on the suicide rate', in *Suicide*, ed. J.P. Gibbs, Harper and Row, New York.

from city to city, they do not necessarily vary by size nor do they remain constant over time.

Henry and Short in Suicide and Homicide[19] attempted to explain in one sweep both homicide and suicide by use of the same theoretical structure. Their theory embraced a kind of economic determinism.

> 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.[20]

This is determined by various sociological and psychological variables including status and the strength of the 'relational system'. They believed that suicide varies positively and homicide negatively with position in the status hierarchy, and that suicide varies negatively and homicide positively with the strength of external restraint over behaviour.

The term 'relational system' which they employed may be correlated to measures of external restraints. According to the authors, the degree of external restraints placed on individuals varies inversely with their status rank. Where there is strong external restraint, the rate of homicide will rise. The behaviour of persons in subordinate roles will be subject to a greater degree of (vertical) external restraint; similarly, those who are involved in meaningful personal relationships will be subject to a greater degree of (horizontal) external restraint than those who are not enmeshed in social relations.

Henry and Short claimed that in advanced capitalist and industrialized societies a chief source of frustration is related to economic recession. Not withstanding limitations inherent in assumptions about relative social status of certain groups in society, Henry and Short provide an insightful theoretical

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19. Henry, Andrew F. and Short, James, F. Jr 1954, *Suicide and Homicide*, The Free Press, New York.
20. Henry & Short, op. cit., p.

approach which attempts to develop unifying criteria in order to explain seemingly diverse phenomena.

Building on the theoretical insight of Henry and Short, Gold[21] in a study of suicide, homicide and socialization, attempted to develop a predictive index of preference for suicide and homicide. In essence, Gold attempted to show that the decision of an individual to commit suicide or homicide is determined by the childhood socialization process and the class position of the person concerned; the socialization of aggression among working class persons is more likely to result in homicide and among middle class persons, in suicide.

In their study of status integration and suicide, American sociologists Gibbs and Martin[22] attempted to develop Durkheim's hypothesis that 'suicide varies inversely with the degree of integration of social groups'. Given that Durkheim's hypothesis is related to the strength of an individual's ties with society, Gibbs and Martin attempted to reformulate his conclusion into an empirically testable proposition by utilizing observable conditions that reflect stable and durable social relationships.

As is obvious from the foregoing discussion, much of the theoretical and empirical work followed the Durkheimian tradition and has been concerned with either operationalizing concepts like social integration, relational system or explaining the causes of variations in suicide rates in modern societies. Very few have taken up the task of examining or refining the classifications of suicide first made by Durkheim and his followers.

There are, however, some important exceptions. Edwin S. Shneidman using suicide notes as the primary data classified suicide into three distinct types: egotic, dyadic and ageneratic.[23] Egotic suicides are those which result from

21. Gold, Martin 1958, 'Suicide, homicide and the socialization of aggression', *American Journal of Sociology*, 63, May, pp. 651-61.
22. Gibbs, Jack P. and Martin, Walter T. 1964, *Status Integration and Suicide*, University of Oregon Press, Eugene.
23. Shneidman, E.S. 1975, 'Classification of suicidal phenomena', in *Deviance: Studies in Definition, Management and Treatment*, eds S. Dinitiz, R.R. Dynes and A.C. Clark, Oxford University Press, New York.

personal torment and unresolved psychological struggles; dyadic suicides are those resulting from conflicts with 'significant others'; and, finally ageneratic suicides are sociological in nature because they relate to one's relationship with, and sense of belonging to, a particular age group or generation. Shneidman also claimed that 'very few suicides occur without casting some shadows before them'.[24]

French Sociologist Jean Baechler in a recent work proposed a typology based on the meanings of suicide. According to Baechler there are four types of suicide. Escapist (flight, grief and punishment), oblative (sacrifice and transfiguration), Ludic (the ordeal, the game) and Aggressive (crime, vengeance, blackmail and appeal). He argued that all types of suicides are rational solutions to particular situations and existential problems. Essentially his analysis highlights the personality as the focal point in the analysis of suicidal behaviour. Certain personalities, according to Baechler, through a lifelong solution process tend to gravitate toward particular positions which sociologists identify as having high suicide rates.[25]

In his book The Social Meaning of Suicide Douglas follows Durkheim's Suicide, in one sense and in another sense also advances an opposite interpretation.[26] Its similarity lies in its format for, in the first part of his book Douglas set out to discount or criticize some of the most popular and accepted sociological approaches to suicide. It is dissimilar in its methodological orientation. After insightfully criticizing the statistical-hypothetical approach to suicide because of the unreliability of suicide statistics for scientific study, Douglas pursued an approach which fundamentally rests on the premise that, in order to understand the social and cultural patterns of suicide, it is necessary to

24. Shneidman, E.S., 'Preventing suicide', in Gibbs, (ed.), op. cit., p. 257.
25. Baechler, Jean 1979, *Suicides*, trans. Barry Cooper, Basic Books, New York, Part II.
26. Jack D. Douglas 1967, *The Social Meaning of Suicide*, Princeton University Press.

start with an 'intensive observation, description and analysis of individual cases of suicide.[27]

He favoured a case-study approach to unravel the personal meaning (or 'inside story') of the suicidal action to the particular individual. He also argued that the actions and reactions of 'significant others' (such as relatives, friends, doctors, etc.) constitute an integral part of the meaning of suicide. And he stressed the importance of an analysis of the individual meaning of suicidal acts in understanding the social meaning of suicide.

Douglas' critique is essentially directed at the epistemological assumptions underlying macro sociological approaches to the study of suicide which rely exclusively on official suicide statistics as their data base. These official statistics, several analysts have argued, are unreliable because of the alleged widespread concealment, misrepresentation and undercounting of suicides.[28]

Pope[29] and Danigelis & Pope[30] have recently attempted to identify and summarize the causal chain that links the level of egoism-anomie to suicide. The general thread of the summary is: the larger the number of people in a group or area, the higher the rate of interaction and the stronger the collective sentiments; the stronger collective sentiments, the stronger integration-regulation; the stronger integration-regulation, the more the individual finds meaning in life and the more means exist in a state of balance with needs, the more content individuals are and the lower the suicide rate. In short, social control and suicide are inversely related.[31]

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27. ibid. p.231.
28. For example, see Phillips, D. 1977, 'Motor vehicles fatalities increase just after publicized suicide stories', *Science*; 196, pp. 1464-65; Stack, Steven 1987, 'The Sociological Study of Suicide: Methodological issues', *Suicide and Life Threatening Behavior*, 17.
29. Pope, W. 1976, *Durkheim's Suicide: A Classic Analyzed*, Chicago University Press.
30. Danigelis, N. and Pope, W. 1979, 'Durkheim's theory of suicide as applied to the family', *Social Forces*, 57:4.
31. Pope, Whitney 1976, *Durkheim's Suicide: A Classic Analyzed*, Chicago University Press, Chicago; and also Danigelis, Nick and Pope, Whitney 1979, 'Durkheim's Theory of suicide as applied to the family', *Social Forces*, 57:4, June.

However, a recent systematic test of the validity of official suicide data in the United States has revealed that the measurement errors found in official data are generally not large enough to preclude meaningful sociological analysis. This study was carried out by the American Sociologists Pescosolido and Mendelsohn and was based on suicide data collected from 404 U.S. counties with populations over 250,000. They were able to distinguish between two sets of independent variables; social construction and social causation factors. Social construction variables are ones thought to be associated with systematic misreporting, which is misreporting whose rate varied according to the nature of the medical-legal system responsible for classifying deaths. The medical-legal system circulates variables such as; percentage of a county served by a medical examiner system, percentage served by a coroner or medical examiner, percentage served by a coroner who can call an inquest, and other indicators of the resources available for clarifying the cause of death. The latter included the percentage of the population of a county with a local toxicologist and/or pathologist. The results indicated that while systematic misreporting was found to exist across different medical-legal systems, such misreporting had little discernible impact on the relationships between social causation variables and suicide. These findings show that after controls for the variation in medical-legal system were introduced there was little change in the effects of education, income, divorce, migration, religion and other independent variables on the rate of county suicide.[32]

Another important strand of sociological research has focussed on the impact of suicide stories in the media on suicidal behaviour. The findings suggest that suicides of entertainment and official celebrities, at least in the United States, tend to trigger waves of imitative suicides. The greater the

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32. Pescosolido, Bernice and Mendelsohn, Robert 1986, 'Social causation or social construction of suicide? an investigation into the social organisation of official rates', *American Sociological Review*, 51, pp.80-101.

amount of publicity given the greater the increase in the suicide rate.[33] In the same vein the research on real violence has generally found a link between the media and real world aggression and suicide.[34]

The foregoing is far from a comprehensive overview of the sociological studies or approaches to suicide. But these, like other sociological studies of the phenomenon, have one thing in common. They explicitly or implicitly take suicide as symptomatic of what is wrong with society: the higher the suicide rate, the greater the social tension and lack of social cohesion. Consequently it is a problem that can be tackled by social engineering, social conscience, and enlightened social services. But so far humans have not succeeded in evolving a society in which some of its members have not sought refuge in suicide. As Erwin Stengal pointed out in his perceptive essay on suicide: 'At some stage of evolution man must have discovered that he can kill not only animals and fellow-men but also himself. It can be assumed that life has never since been the same to him'.[35]

Psychological Analysis of Suicide

That suicide may be a human characteristic is what makes it interesting for psychology, psychiatry and psycho-analysis. The psychological approaches hypothesize about a 'suicide personality'. Depression and aggression are frequently cited as determinants of suicide. The findings of psychological studies tend to show depression as more closely associated to suicide than aggression. Other psychological factors found to be associated with suicide are social isolation, disrupted social relations, death in the family, marital discord, divorce,

33. Stack, Steven 1987, 'Celebrities and suicide: a taxonomy and analysis, 1948-1983', *American Sociological Review*, 52:3, and Phillips, D. 1986, 'Natural experiments on the effects of man media violence on fatal aggression' *Advances in Experimental Social Psychology*, 19; Godney, R.D. 1989, 'Suicide: the role of the media', *Australian New Zealand Journal of Psychiatry*, 23, pp. 30-34.

34. Phillips, D. 1974, 'The influence of suggestion on suicide', *American Sociological Review*, 39, 340-54, and Phillips, D. and Bohem Kenneth 1985, 'Same time last year: selective data dredging for negative findings', *American Sociological Review*, 50, pp.364-71.

35. Stengel, E. 1969, *Suicide and Attempted Suicide*, Penguin Books, Hammondsworth, p.14.

physical illness and psychopathology. Excessive drinking is also found to be associated with suicide.[36] But the important question is how do all these things link together? Do they contribute directly to suicide in a cause-effect relationship or are they manifestations of some third variable such as a personality type?

The foundation of the psychological approach was laid by Sigmund Freud in his famous essay on depression entitled 'Mourning and Melancholia'. To quote Freud:

> So immense is the ego's self-love, which we have come to recognise as the primal state from which instinctual life proceeds, and so vast is the amount of narcissistic libido which we see liberated in the fear that emerges as a threat to life, that we cannot conceive how that ego can consent to its own destruction. We have long known, it is true, that no neurotic harbours thoughts of suicide which he has not turned back upon himself from murderous impulses against others, but we have never been able to explain what interplay of forces can carry such a purpose through to execution. The analysis of melancholia now shows that the ego can kill itself only if, owing to the return of the object-catharsis, it can treat itself as an object - if it is able to direct against itself the hostility which relates to an object and which represents the ego's original reaction to objects in the external world. Thus in regression from narcissistic object choice the object has, it is true, been rid of, but it has nevertheless proved more powerful than the ego itself. In the two most opposed situations of being most intensely in love and of suicide the ego is overwhelmed by the object, though in totally different ways.[37]

For Freud, suicide was, then, the ultimate form of depression and it represented an earlier desire to kill someone else turned against oneself. Suicide occurs when the death instinct (Thanatos) becomes stronger than the life instinct (Eros). Menninger who refined and elaborated Freud's ideas proposed that suicide involves the wish to kill and wish to be killed. The wish to kill stems from introjection, which leads to the wish to be killed, because 'murder alone justifies

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36. See Gibbs, op. cit., Part II, particularly papers by William A. Rushing, 'Individual behaviour and suicide'; Sainsbury, P. 1955, *Suicide in London*, The Institute of Psychiatry; Shneidman, E. (ed.) 1976, *Suicidology: Contemporary Developments*, Grane and Strattan, London, Part II and III.

37. Freud, Sigmund 1964, 'Mourning and melancholia', in *Complete Psychological Words*, eds J. Strachy et al., XIV, London, p. 252.

in the unconscious the death penalty, even when both are acted out upon the self'.[38] Two personality mechanisms are associated with the two wishes. Corresponding to the wish to kill is a tendency to use introjections as a defence mechanism, and the wish to be killed is generated by a punitive ego that creates guilt, self-hatred and the need for self-punishment once introjection has occurred.[39]

Generally speaking psycho-analytical theories concern some psychodynamic mechanism as the determining factor in suicide and this is what places the major limitation on all psycho-analytic and psychological and psychiatric theories of suicide - these various mechanisms may not be a universal phenomenon.

Socio-Biological Analysis of Suicide

In recent years socio-biologists investigating aggressive, self-assertive and deviant behaviour have suggested that somatic alterations may be an important cause of such behaviour patterns. Some have even identified dangerous driving by young males as a pattern of self-destructiveness not unconnected with suicidal behaviour. Others have reported results indicating possible relationships between abnormal paroxysmal E.E.G. (electroencephalogram) and suicide ideation, suicide ideation plus attempts, and assaultive-destructive behaviour without a suicidal component.[40] The evidence reported shows that for both males and females, there is a positive significant association between the syndrome of suicidal behaviour and a particular pattern of brain performance. In particular, elevated 17-hydroxy-corticosteroid levels have been identified as antecedents of suicidal behaviour.

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38. Menninger, K. A. 1938, *Man Against Himself*, Harcourt, Brace and World, New York, p. 55.
39. ibid, pp.39-51 as summarized in Rushing, W. 'Individual behaviour and suicide', in Gibbs ed., op. cit., p. 109.
40. Tiger, L. 1975, 'Somatic factors and social behaviour', in *Biosocial Anthropology*, ed. R. Fox, Malaby Press, London.

The clinical evidence however, is still a long way from establishing the manner in which paroxysmal or other brain functions influence the development and expression of suicidal behaviour. One plausible explanation put forth is the paroxysmal E.E.G. dysrhythmias are probably associated with vulnerability to the impairment of controls under stress, leading to a variety of impulses and actions such as assaultive-destructive or suicidal behaviour.[41]

Studies are now being carried out in the United States and other countries to identify possible biological markers of suicide by focusing on the relationship between biochemical factors and aggression. In the presidential address at the annual meeting of the American Association of Suicidology, held in May 1987 in San Francisco, Dr. Cynthia Pfeffer acknowledged that recent scientific advances have suggested a type of brain fever among certain suicidal individuals who for example, have been found to be deficient in brain neuro-transmitter.

Other research suggests that neuro endocrine, neuro-transmitter and genetic factors are associated with some individual suicidal behaviour. The expression of suicidal impulses, she opined, needs to be studied for their etiology, natural course and treatment responses. In so doing 'we may come to a better understanding of whether suicidal behaviour is a distinct psychopathological entity, whether this be a homogeneous or heterogenesis.'

The main criticism by socio-biologists of Durkheim's approach is that it disregards the role of any endogenous factors within the self-destructive organism itself.

> The implication is not, of course, that Durkheimian procedure is incorrect but that it is incomplete. In view of the last increments of information in biological and medical sciences since Durkheim announced his rules of sociological method and applied them to the problem of suicide, it is scarcely surprising that the rules are no longer reliable guides to the descriptions and analysis of social reality.[42]

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41. Struve, F.S., Klein, D.F. and Saraf, K.S. 1972, 'Electroencephalographic correlates and suicide ideation and attempts', *Archives of General Psychiatry*, 27 September.
42. Tiger, op. cit., p.126-7.

The criticisms by socio-biologists of the sociological approach to suicidal behaviour are worth noting only in the sense that like the psychological and psycho-analytic approach, they point out the possible role of endogenous factors within the self-analytic approach, as well as within the self-destructive organism itself; but there is no conclusive clinical evidence as yet to suggest that chemical changes associated with suicidal and other forms of aggressive actions are unrelated to explicit sociological stimuli.

Study of Suicide - Recent Trends

In recent years the sociological and psychological approaches have tended to merge in some areas, with sociologists referring to links between the social environment and self destruction and psycho-analysts relating sociological variables such as marital status, or social status with psychological variables such as depression or frustration.[43] Maurice L. Farber's 'Theory of Suicide' represents, perhaps, a good example of this eclectic approach.[44] Farber sees suicide as a fundamental contradiction and a real puzzle, for it is in suicide that man uses his power and intelligence to destroy that very power and intelligence.

The basic proposition is that the frequency of suicide in a population is a function of an individuals' susceptibility and vulnerability to self-destruction, and the extent to which certain deprivations exist in society. The basic idea is essentially Durkheimian in its acknowledgement of the sociological avenue to suicide, and psychological in its recognition of the forces acting on and within the individual.

Suicides, according to Farber's theory, are committed by psychologically damaged personalities confronted by social privation. Suicide is an act of

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43. Farberow, Norman, Shneidman, E.S. and Neuringer, Charles 1968, 'Case history and hospitalization factors in suicides of neuropsychiatric hospital patients', in *Suicide*, ed. J. Gibbs, Harper and Row, New York.
44. Farber, Maurice L. 1968, *Theory of Suicide*, Funk and Wagnalls, New York.

hopelessness and desperation, the probability of which is an inverse function of the level of hope which itself is determined by the interaction of social contingencies and psychological vulnerability. Suicide arises from a situation where a psychic blow has occurred, be it failure, dishonour, poor health, economic distress or death of a loved one: these are all factors which help to erode hope, for each of these determinants makes life more difficult to cope with and negates any possibility of improvement in the situation.

This then goes on to build up internal pressure which, if it is not released through some non-self-destructive channel, will result in the individual destroying himself. The act is a resolution sought to solve a situation of anomie, of inner chaos and contradiction; it is an action whereby one seeks to remove oneself from a life situation which has become intolerable. The situation is psychologically complex and may embrace 'a cry for help', a 'gamble with death' or a longing for self-punishment.

The psychological and psycho-analytical approach to suicide, which as mentioned earlier, places emphasis on forces operating within the human personality, has been criticized on several counts. One major criticism is that not all depressed persons commit suicide. Another criticism involves the impossibility of observing and recording an individual's state of mind at the exact time he or she commits suicide. Clinical records accumulated prior to the suicide may be helpful, and suicide notes and interviews with the associates of the particular victim may provide further clues; however, at best these can only reveal the necessary conditions for the act and not the sufficient conditions.

The psychological and psycho-analytical theories of suicide prove perhaps, only what was already obvious; that the processes which lead a person to commit suicide are at least as complex and difficult as those by which he/she continues to live. The theories help untangle the intricacy of motive and mechanism and define the ambiguity of the wish to die or kill but they say little

about what it means to be suicidal or provide accurate, universal predictive measures.[45]

The sociological approach to suicide has been further criticized for its almost complete reliance on statistical data which was not collected specifically with such a purpose in mind and which, it is claimed, is often inaccurate. The durability and vitality of the Durkheim Schema is remarkable in itself and, some would argue has led to the perpetuation of certain basic errors in conceptualizing the problem. Schneidman, for example, claims that Durkheim's three aetiological types of suicide are of no use to the clinician who is faced with a suicidal person; and Douglas in his critique chastises contemporary theorists for uncritically accepting Durkheim's assumption that each person who is a member of a particular society is automatically enmeshed to the same degree in a homogeneous culture and holds identical normative values.

Perhaps it needs to be stated that no study of suicide be it sociological or psychological or biological should be judged categorically, for the aetiology of suicide remains elusive, and studies must be viewed according to their appropriateness and their empirical as well as theoretical contribution to the ongoing scientific investigation. Gibbs puts it succinctly when he says:

> The appropriate standard (of a study) is a relative one. In the case of theories, the central question is not the absolute predictive power of a theory but, rather, its relative power in comparison to other theories. And in assessing research the question hinges on what the investigation accomplished relative to limitations on resources, the availability of data in particular. Thus, one should not reflect the findings of an investigation because they are restricted to a particular community or country, nor because they are based on official statistics. Research resources are never infinite and if we demand global research or 'perfect' data, we will wait forever.[46]

At present no theory of suicide adequately embraces all facets of the phenomenon nor provides a common denominator by which accurate predictions

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45 For an illuminating critique of social psychological theories of suicide see Alvarez, A. 1969, *The Savage God - A Study of Suicide*, Penguin Books, Harmondsworth.

46 Gibbs, op. cit., p. 199.

can be made to distinguish those who are potential suicide victims or social conditions which can explain the variation in suicide rates. For continuous theoretical and methodological advancement in the study of suicide comparative studies of the phenomenon are imperative. The study which follows constitutes an attempt to contribute to the 'empirical sources' which would advance our understanding of the suicide phenomenon and hopefully contribute towards the development of more cross-culturally and cross-nationally valid and relevant theoretical propositions.

In its theoretical orientation and empirical data the study can be located, broadly, in the theoretical framework espoused by Durkheim and his students. The intention of this study, however, is not to deny the possible role of psychogenic and biogenic factors in the actiology of suicide but to highlight the role of social factors in suicidal behaviour. These factors include age, sex, ethnicity, marital status, social isolation, nature of social integration, occupation, economic cycles and modernization. What is explored is not how these factors influence individual suicides but how they impinge on the production of suicide rates in contemporary Australian society and how changes in their definition or context effect the fluctuations in suicide rates over time.

The data on which this study is based were obtained from the published and unpublished records of the Australian Bureau of Statistics and from the records of the South Australian State Coroners Court. Some data were also extracted from the death registration forms. More specific and relevant information about the data used in this book and some of the major methodological issues will be provided in the appropriate sections.

CHAPTER 2

STUDY OF SUICIDE IN AUSTRALIA

DETERMINATION OF SUICIDE

The problem of defining suicide raises some important and interesting epistemological and methodological issues. Historically it has been regarded as a deviant act. Some have even argued that abhorrence of suicide is a fundamental value of Western society.[1] And yet, in Western cultural history, the self-destruction of martyrs for their faith, soldiers for their battalions or mothers for their children is not unknown. There is certainly evidence of cases of 'honourable' suicides in other cultures. Examples include the Japanese Kamikaze pilots of World War II, the now defunct custom of sati amongst predominantly higher cast Indian women and, more recently, suicide-mission drivers in the Lebanon who have steered their trucks laden with dynamite into American, French and Israeli military camps.

A uniquely Australian pattern of suicide by lottery which evolved in the brutal and harsh conditions of Norfolk Island penal colony in the 1830s also turned suicide into an act of bravery and solidarity. According to a recent account by Hughes[2]

> A group of convicts would choose two men by drawing straws: one to die, the other to kill him. Others would stand by as witnesses. There being no judge to try capital offenders on Norfolk Island, the killer and witnesses would have to be sent to Sydney for trial - an inconvenience for the authorities but a boon for the prisoners, who yearned for the meagre relief of getting away from the 'Ocean hell', if only to a gallows on the mainland. And in Sydney, there was some slight chance of escape. The victim could not choose himself, everyone in the group, apparently, had to be equally ready to die, and the benefits of his death had to be shared equally by all

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1. Simpson, G., 'Methodological problem in determining the actiology of suicide', *American Sociological Review*, 15, pp. 658-63.
2. Hughes, R. 1988, *The Fatal Shores.*

> survivors. Suicide by lottery thus acquired a Roman tinge of disinterestedness.[3]

This practice was apparently not uncommon on Norfolk Island in the 1830s. Several accounts of it were written by contemporary visitors and observers including a full account by Captain Foster Fyan's which was based on interviews of members of work gangs involved in it.[4]

An interesting aspect of the problem of definition is how some deaths are classified as deviant and others are not. There is also the problem of imputing suicidal intention to a death. Many people have dangerous habits which occasionally, and with varying degrees of probability, are lethal. Actions such as smoking, consuming alcohol, driving recklessly, and in-actions such as the failure to take medication or other preventive measures are examples of such habits. In the case of unexpected deaths, the problem of imputing intention is, in the last instance, in most countries these days, left to the respective coroner to determine.

The common practice in coronial investigation of suicide in Australia is that intent begins to be imputed immediately after a body has been found. If the individual has died in a vehicular accident, suicide is seldom assumed, but if the individual has died by hanging or carbon monoxide poisoning, or left a 'suicide' note, suicide is generally imputed.

In respect of defining suicide, in the final analysis the suicidologist is almost always compelled to operate with the definition employed by the particular coroner concerned. This definition may or may not be the formal one which is written into the statute books. Atkinson, from his extensive observation in the offices of various coroners in the United Kingdom concludes that the formal and working definitions of suicide are quite distinct.[5]

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3. Hughes, op. cit., p.468.
4. Fyans, Captain Foster, *Memoirs, 1790-1870*, Geelong, 1986
5. Atkinson, J.M. 1978, *Discovering Suicide: Studies in the Social Organization of Sudden Death*, Macmillan Press, London.

One of the aims of the preceding observations is to emphasise the impossibility of defining unambiguously and unproblematically the term suicide. The official data are socially constructed and interpreted by those dealing with unexpected deaths according to norms operating within a particular society. Apart from this, it is highly probable that other factors intervene so that not all deaths which could possibly be officially classified as suicide reach the coroner's desk. This study, focuses on the cases of unexpected death which have 'officially' been designated as suicide.

Official Suicide Statistics: Differences between Countries

Given the difficulties associated with uniformly classifying unexpected deaths within particular countries and cultural entities, one might expect that both the usefulness of international comparisons of suicide statistics and the transferability of the findings of particular studies are limited. Certainly, statistical comparisons of suicide in different countries have recently come under close scrutiny, and factors such as religious and social attitudes, and differences in coroners' practices and interpretations have been examined in an attempt to explain variations in the rates.[6]

In Denmark for example, where the official rate of suicide appears to be much higher than in most other European nations, research has revealed an important difference in the way in which official statistics are compiled. All cases of unnatural death in Denmark must be certified by an independent health officer rather than a medical practitioner who is known to the family concerned.[7] In Ireland, where the official rate of suicide is relatively low, the incidence of under-reporting was higher than in England, Scotland and Wales. In support of

6. Atkinson 1978, op.cit., p. 50; Goldney, R.D. and Burvill, P.W. 'Trends in suicidal behaviour and its management', *Australian and New Zealand Journal of Psychiatry*, 14, pp. 1-15; Sainsbury, P. and Barraclough, B. 1968, 'Differences between suicide rates', *Nature*, 220, p. 1252; Stengel, E. and Farberow, N.L. 1968, 'Certification of suicide around the world' in *Proceedings of the Fourth International Conference for Suicide Prevention*, Delman, Los Angeles.

7. Atkinson, op.cit., p. 53.

this, a study by Burvill et al.[8] indicated that the suicide rate of Irish migrants living in Australia was approximately the same as migrants from England, Scotland and Wales.

It is not only a question of whether the aggregate rates of suicide of particular countries are comparable, but also a question of whether discrepant rates of recording are apparent within particular sub-categories such as ethnic, sex, age and occupational groups. After analysing 'borderline' suicide and accident cases in Denmark, Kirsten Rudfeld[9] concluded that there was a slight tendency for ambivalent female cases to be regarded as suicides and male cases as accidents. Furthermore, she argued that the trend towards misregistering suicides as accidents amongst the very elderly, seriously undermined the common hypothesis that suicide declines amongst the very elderly.

Fatima Meer investigated the reporting and classification of suicide in South Africa. She had access to the records of the Durban Inquest Court for the periods 1940-1960 and 1962-70, and examined cases of death classified as suicide, accidental and unnatural, and concluded that the 'actual' rate exceeded the official rate by 17.4 per cent.[10] It was her opinion that, although 'South African magistrates tend to give suicides the benefit of the doubt',[11] this does not imply that errors are randomised between racial groups. In other words, her investigation did not reveal a relative capacity amongst racial groups (or, for that matter, status groups) to hide suicide. In contrast, Sainsbury and Barraclough argued that, so far as the United States was concerned, differing procedures for recording unexpected deaths could not account for differences in the suicide rates of various ethnic groups.[12] They concluded that 'National and international suicide statistics are sufficiently reliable to be of scientific value,

8. Burvill, P.W. et al. 1973, 'Immigration and mental disease', *Australian and New Zealand Journal of Psychiatry*, 7, pp. 1550-62.
9. Rudfeld, K. 1962, 'Sprang han eller feldt han. In bridgagtel belysuing af grainsoemradet mellan selvmord og ulikka' *Sociologiske Meddelelsen*, 7, pp. 3-29.
10. Meer, F. 1976, *Race and Suicide in South Africa*, Routledge and Kegan Paul, London.
11. Meer, op.cit., p. 25.
12. Sainsbury and Barraclough 1968, op.cit.

although they need to be interpreted critically'.[13] This conclusion was confirmed by another recent American study.

Pescosolido and Mendelsohn[14] used suicide data from 404 United States counties to study the social organization of official suicide rates. They concluded that although suicides in the United States were consistently underreported this factor alone did not significantly affect the explanatory sociological variables. They suggested that:

> Suicides do, in fact, appear to be consistently under-reported, and this is related to the legal and organizational character of agencies responsible for classifying deaths. We find, however, that misreporting has little effect on the relationship between suicide rates and indicators of concepts in sociological theories of suicide. Whether or not misreporting is taken into account, the coefficients of social causation factors have this same and the same approximate magnitude. Despite the fact that suicides may be unilaterally under-reported, we find that this makes very little difference in the fundamental causes of suicide in the United States.[15]

Suicide and the Law in Australia

Because the Australian colonies developed on the basis of English cultural and legal traditions, suicide and attempted suicide were regarded as criminal acts and, as such, suitable laws were embodied in the original criminal codes of the respective colonies. The process of altering the legal codes commenced in the late nineteenth century. In Victoria, in 1886, laws were enacted to allow the performance of Christian burial rites for suicide victims, and in 1878 forfeiture of property as a possible legal consequence of suicide was ended.[16] This helped put to rest the English tradition of punishing the suicide through bodily mutilation, forfeiture of property and crossroad burial.

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13. ibid.
14. Pescosolido, B. and Mendelsohn, R. 1986, 'Social causation or social construction of suicide? an investigation into social organization of official rates', *American Sociological Review*, 51, pp. 80-101.
15. Pescosolido and Mendelsohn, op.cit., p. 94.
16. Barry, Sir John Vincent 1965, 'Suicide and the law', *Melbourne University Law Review*, 5, pp. 1-16.

Over time, further reforms were made which reflected shifts in community attitudes. In 1899, suicide in Queensland ceased to be a crime, and in 1902 and 1924 Western Australia and Tasmania respectively followed suit. The other Australian states did not act as speedily in amending their laws on suicide. For example, a Law Reform Committee established to advise the South Australian Attorney-General, reported in 1970 on the difficulties associated with amending existing legislation under which suicide was regarded as a criminal offence. In its view 'unnecessary complications' could arise in amending legislation. Repercussions could arise, for example, regarding the law of life insurance.[17] More than a decade was to pass before laws decriminalising suicide and attempted suicide were passed by the South Australian Parliament.

The crime of attempted suicide was abolished from the statute books of Tasmania in 1957 and Victoria in 1967. In 1972, Western Australia followed suit, and in 1979 Queensland became the fourth state to remove attempted suicide from its statute books. In 1983, New South Wales and South Australia legally conformed to the popular belief that it was unsuitable to punish in a court of law those who attempted to end their own lives.

Although suicidal actions are not now generally within the legitimate realm of criminal law in Australia, legislative reform has not been extended to cover those who assist or encourage another person to commit suicide. As such, relatives, friends, professionals, parties to suicide pacts, and members of voluntary euthanasia societies who disseminate information or assist in the sudden (but not unexpected) death of another person would appear to be in a vulnerable legal position. In New South Wales, a person who 'aids and abets' the suicide or attempted suicide of another person is liable to imprisonment for five years. The charges and terms of imprisonment vary from state to state.

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17. The Law Reform Committee of South Australia 1970, *Fourteenth Report of the Law Reform Committee of South Australia to the Attorney-General: Suggested Amendments to the Law Regarding Attempted Suicide*, Adelaide.

In Australia at present a verdict of suicide is determined by the State Coroners. Under the laws which currently apply, a coroner's inquest is held in order to ascertain the cause or circumstances of any death which has occurred due to violence or under unusual or unknown circumstances. The coroner's verdict usually falls into one of the following broad categories: death due to natural causes; murder; accident; suicide; death due to undetermined cause or causes. If a verdict of suicide is returned, it is classified by the Australian Bureau of Statistics in the rubrics 950-959 of the International Classification of Disease (ICD), and published annually as part of the Death Statistics in Australia.

Australian Data

No study of possible variations in the recording practices of State coroners has yet been published in Australia, although a mimeo by Oliver[18] from Monash University claimed that the majority of under-reported cases in Australia were classified as accidental death.[19]

In a recent study, Hassan and Carr[20] examined unexpected deaths which occurred in Australia between 1972 and 1981 and which were officially classified as accidents or suicides, or in which the State coroner concerned was unable to determine the cause of death. The result of this study revealed that over the ten year period, South Australia had the lowest proportion of undetermined deaths in Australia (none in 1972-6; and 0.2% in 1977-81). South Australia also had the

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18. Oliver, R.G. 1971, 'Comments on the differences in rates of reported suicide between states of Australia', mimeo, Department of Social and Preventive Medicine, Monash University.
19. Recently Burvill et al. (1982) examined the Australian data pertaining to suicide and accidental deaths (I.C.D.7) for the years 1962-68 and compared their data with those for suicide, undetermined deaths and accidental deaths (I.C.D8 for 1968-7). These findings suggested that deaths classified as 'undetermined' after the introduction I.C.D.8 category in 1968, were previously classified as accidental. This was especially so in the case of deaths from poisoning. Burvill, P.W., McCall, M.G., Stenhouse, N.S. and Woodings, T.L. 1982, 'The relationship between suicide, undetermined deaths and accidental deaths in the Australian born and migrants in Australia', *Australian and New Zealand Journal of Psychiatry*, 16, pp. 179-184.
20. Carr, J. and Hassan, R. 1987, 'Social construction of suicide in Australia', unpublished paper, Sociology Discipline, Flinders University, Adelaide.

highest proportion of suicides during the period 1977-81 (23.5%) and the second highest proportion during the period 1972-6 (19.1%). During the period 1972-6, New South Wales had the highest proportion of undetermined deaths (3.6%) and the highest proportion of suicides (19.4%). As a result, it had the lowest proportion of accidents (77.0%).

During the period 1977-81, the proportion of undetermined deaths and suicides in New South Wales fell to 1.5% and 18.8% respectively, and accidents rose to 79.6% - giving it the highest proportion of accidents of any State or Territory except the Northern Territory. The Northern Territory recorded the highest proportion of accidents during the decade (88.7% in 1972-6; and 88.4% in 1977-81). Conversely, the proportion of suicides in the Northern Territory fell well below the other States and Territories (9.9% in 1972-6; and 8.2.% in 1977-81).

From the above, it can be concluded that during the decade in question, the South Australian Coroner was more likely than most other Australian coroners to categorise an unexpected death as suicide. The New South Wales Coroner, during the period 1972-6, was more likely than other Australian coroners to categorise an unexpected death as undetermined or suicide rather than an accident. During the decade 1972-81, the Northern Territory Coroner was more likely than other Australian coroners to categorise an unexpected death as an accident and most unlikely to regard it as suicide. In the period 1977-81, the Northern Territory coroner increasingly categorised unexpected deaths as undetermined, thus reducing still further the proportion of suicides.

The analyses of the data by year and sex indicates the proportion of unexpected deaths in each State or Territory which were officially attributed to suicide. The data reveal that for Australia as a whole, the proportion of suicides was consistently higher amongst males than females between 1976-81. This trend was reasonably consistent in all States and territories except Queensland and Tasmania. During the period 1972-5, for Australia as a whole, the

proportion of suicides was consistently higher amongst females than males. Between 1972-81, the Northern Territory consistently had a proportion of suicides well below the other States and Territories. In seven years out of ten, the proportion of female suicides in Queensland was higher than the proportion of male suicides. One may infer from this that proportionately more male unexpected deaths in Queensland were classified as accidents, for in Queensland during the seven years in question the proportion of male deaths which were undetermined was comparatively low. There was also a pronounced tendency in this period for the proportion of 'undetermined' deaths to be higher amongst females than males.

A closer analysis of this data also revealed that between 1972-5, unexpected male deaths were more likely to be classified as accidents than unexpected female deaths and unexpected female deaths were more likely to be classified as suicides than males. In 1976-81 the position was reversed, with unexpected male deaths having greater chance than female deaths of being classified as suicide. In other words during this period, unexpected female deaths had a greater chance than male deaths of being classified as accidents. Between 1972-81, the undetermined classification became more popular.

One of the ways in which bias may creep into the statistics on unexpected death is through the official imputation of meaning. For example, although there is recognition in both academic and administrative circles that motor vehicle accidents may be a relatively common method of suicide,[21] very few motor vehicle fatalities are actually recorded as such in Australia. Notably, there

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21. The Director of Mental Health Services in South Australia has acknowledged that 'some vehicular accidents ... are without doubt suicidal compromises', *Fourteenth Report of the Law Reform Committee of South Australia to the Attorney-General: Suggested Amendments to the Law Regarding Attempted Suicide* (1970: 7) Government Printer, Adelaide.
The possibility of covert suicide by motor accidents (and aeroplane accidents) has been referred to in several studies including Goldney, R.D. 1983, 'Homicide and suicide by aircraft', *Forensic Science International*, 21, pp. 161-63; Ford, R. and Moseley, A.L. 1963, 'Motor vehicle suicide', *Journal of Criminal Law, Criminology and Police Sciences*, 54, pp. 257-259; Phillips, D.P. 1978, 'Motor vehicle fatalities increase just after publicized suicide stories', *Science*, 196, pp. 1464-65.

is no such specific category within the international classification of suicide and self-inflicted injury. This is also the case with death by electric current: within 'accidental death' there is an official category (No. 925), but not within 'suicide and self-inflicted injury'. Similarly, accidental burning caused by ignition of highly flammable material has a classificatory number (No. 894), but not if it is a suicidal action.

It can be argued that those officially concerned with classifying unexpected deaths are influenced in their interpretations by the classificatory schema available to them and by their 'common sense' assumptions regarding the relationship between cause (motive) and method of death. Although the data discussed here give no final verification of this hypothesis, it does indicate that, (1) certain methods of dying are associated with injuries officially classified as accidental or self-inflicted; and (2) that gender sometimes plays a part in this association.

Almost all deaths due to carbon monoxide poisoning, are regarded as suicide. This form of dying is more strongly associated with males than females, there being approximately six times as many male deaths attributed to this method.

With reference to death by firearms many more males than females are affected. It is also clear that, although such deaths are usually regarded as suicidal actions rather than accidents, there is nevertheless a tendency for proportionately more female deaths by firearms to be classified as suicide.

In the case of unexpected deaths which occur on account of drowning, proportionately more are recorded as accidental than suicidal. However, the situation is more ambivalent with regard to women, for although fewer women than men die by drowning, proportionately more cases are recorded as suicide. For example, in Australia in 1972-6, the male ratio of suicides to accidents by drowning was 0.1:1, while the female ratio was 1.1:1.

Cutting and piercing also appears to be a predominantly male phenomenon. However, one could interpret the data as signifying that, when a woman dies by cutting and piercing, it is more likely to be officially interpreted as suicide than if a man dies by this method.

Suicidal Notes

Another potential problem concerns the weight which one is willing to attach to alleged suicide notes. These notes are frequently regarded as 'facts' by those involved in the classification of death. For example, in the South Australian data for 1982, 45 files (27.1 per cent) had attached to them notes allegedly from the deceased. Some were equivocal in that they did not explicitly infer that the writer intended to commit suicide, whereas others clearly indicated the suicidal intent.

Another aspect concerning notes was that the evidence collected on the coroner's file did not always explicitly confirm that handwriting in the note had been verified with that of the deceased person. Sometimes such verification was purely verbal and was confirmed by a near relative.

The problems associated with the determination of suicide in Australia as elsewhere indicate the intriguing complexities associated with analysing data and making sociological assumptions about the aetiology of suicide. If it is true that one cannot escape investigating suicide without the aid of official data, it is also true that one must proceed with extreme caution and must view the results relatively viz a viz other studies of the phenomenon. As noted earlier a recent American study about the social organization of suicide rates has indicated that a systematic misreporting bias in suicide registration exists in the United States. However, this misreporting in the official statistics has little discernible impact

on the effects of variables commonly used to test sociological theories of suicide.[22]

The problems which have been discussed above are also applicable to the suicide data in Australia which will be reported in the following chapters. This study is based on the 'official' suicide statistics supplied by the Australian Bureau of Statistics. It is reasonable to assume that as in the American case reported by Pescosolido and Mendelsohn there is probably also a systematic bias in suicide registration in Australia and in the American case because of its systemic nature this bias does not adversely affect the testing of sociological propositions. Some parts of the study are based on the information gathered from the South Australian Coroner's Court suicide file. The reference to the methodology used and its limitation will be discussed in the appropriate chapters.

A REVIEW OF PAST SUICIDE STUDIES

Before proceeding to report and discuss the findings of this study it seems appropriate to provide a brief general overview of suicide studies to date. Much of the research on suicide in Australia has been carried out by the medical profession, especially psychiatrists. Most of these studies tend to be (problems oriented and) primarily concerned with medical, mental health and suicide management. A few have explored the social correlates of suicidal behaviour. In general there seems to be a dearth, or simply a lack of interest in the sociological approach. The following section provides a brief general overview of the status of suicide research in Australia.[23]

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22. Pescosolido and Mendelsohn, op.cit.
23. By no means intended to be a comprehensive survey of all suicide studies. Given the intellectual perspective of this book we have tried to focus only on those studies which relate to opening debates in sociology.

The first sociological study of suicide was probably that of Knibbs,[24] who in 1912, examined suicide trends between 1858 and 1910. Other early studies of significance were undertaken by S.J. Minogue, who in three papers published between 1935 and 1945 examined suicide trends among various groups in New South Wales.[25] Similar studies were conducted by Derrick[26] for Queensland and Duncan for Tasmania.[27] E.G. Saint[28] in his Barton Pope lecture on mental health in 1964 took a distinctly sociological approach and many of his findings were similar to those suggested by Emile Durkheim. His data revealed a fall in the suicide rate during the two World Wars, a rise in the 1930s depression and during times of high unemployment and bankruptcy. Two other general socio-statistical surveys for Western Australia and South Australia were undertaken by Clifford and Marjoram[29] in the 1970s.

Over time studies of suicide have become more focussed and problem oriented. Large scale migration has been one of the most important factors in shaping Australian history and society. A number of studies have focussed on the relationship between suicide and migration. Some of the general findings of these studies reveal significant differences in suicide rates and methods of suicide among various ethnic groups. Additionally, length of residence in

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24. Knibbs, G.H. 1911, 'Suicide in Australia: A statistical Analysis of the Facts', *Journal and Proceedings of the Royal Society of New South Wales*, pp. 225-246. Prior to Knibbs' study, Coghlan, T.A. in his first statistical account of Australia had also included statistics on suicide. He was probably one of the first researchers to question the accuracy of suicide data and warned that the actual number of suicides was larger than reported by Coroners juries. See Coghlan, T.A. 1904, *A Statistical Account of Australia and New Zealand*, 1902-3. Tenth Issue, Government Printer, Sydney.
25. Minogue, S.J. 1935, 'Suicide in Australia' *The Medical Journal of Australia*, June 8, pp. 707-714; also in Minogue, S.J. 1936, 'Symptoms preceding suicide', *The Medical Journal of Australia*, Oct, 2, p. 598.
26. E. H. Derrick 1941, 'Suicide and its Prevention', *The Medical Journal of Australia*, 1, pp. 668-672.
27. Duncan, C. 1954, 'Suicides in Tasmania', *The Medical Journal of Australia*, July, 2, pp.166-8.
28. Saint, E.G., 'Suicide in Australia' The Barton Pope Lecture on Mental Health, South Australia, delivered at the Association for Mental Health, Adelaide, Aug. 14th, 1964.
29. Clifford, W. and Marjoram, J. 1974, *Suicide in South Australia,* Australian Institute of Criminology, and their *Suicide in Western Australia*, Australian Institute of Criminology, Canberra.

Australia is associated with changes in rates and methods.[30] Migrants from Southern Europe were found to have lower reported suicide rates than those from the Baltic States and other East European countries.[31] A number of researchers agree that those migrants who maintain their traditional culture and behavioural patterns are less suicide prone than those who do not.[32] At a more specific level of behavioural assimilation, a study by Whitlock[33] reveals that English speaking migrants adopt Australian attitudes to suicide more readily than do the non-English speaking migrants. This is reflected in their rates and methods of suicide. English speaking migrants from Great Britain, Ireland and New Zealand become more strongly acculturated to Australian attitudes including those toward self-destruction.[34]

Some studies have also tried to explore, albeit somewhat inconclusively, the relationship between occupation and suicide. The inconclusiveness is primarily due to the quality of data about occupation. Studies on suicide and age have found that suicide rates for Australian children are not significantly different from those reported for the United States and the United Kingdom.[35] Studies of the relationship between age and suicide have, at least until the 1960s,

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30. Burvill, P.W. 1971, 'Suicide in Western Australia, 1967', *Australian and New Zealand Journal of Psychiatry*, 6, pp. 37-44; also Goldney, R. D. and Burvill, P.W. 1980, 'Trends in suicidal behaviour and its management', *Australian and New Zealand Journal of Psychiatry*, 14, pp. 1-15.
    Burvill, P.W. 1979, 'Methods of suicide in Western Australia', *The Medical Journal of Australia*, 29, August, pp. 411-414.
    Whitlock, F.A. 1971, 'Migration and suicide', *The Medical Journal of Australia*, 2, pp. 840-8.
    Burvill, P.W., Woodings, T.L., Stenhouse, N.S., McCall, M.G. 1982, 'Suicide during 1961-70 of migrants in Australia', *Psychological Medicine*, 12, pp. 295-308.
31. Whitlock, op. cit; Putnins, A.L. 1981, *Latvians in Australia: Alienation and Assimilation*, ANU Press, Canberra.
32. Putnins, op. cit.; Whitlock, 1971, op. cit.; Burvill p (1973 p. 198)?
33. Whitlock, op. cit.
34. Burvill, P.W., 'Methods of suicide in Australia' op. cit.; Burvill, P.W., McCall, M.G., Reid, T.A., Stenhouse, N.S. 1973, 'Methods of suicide of English and Welsh immigrants in Australia', *British Journal of Psychiatry*,123, pp. 285-94; see also their 'Deaths from suicide, motor vehicle accidents and all forms of violent deaths among migrants in Australia', *Acta Psychiat Scand*, 49, 1973, pp.28-30.
35. Kosky, R. 1982, 'Suicide and attempted suicide among Australian children', *The Medical Journal of Australia*, 1, pp. 124-126; Clifford and Majoram, op. cit.

found that generally suicides increase with age.[36] But studies conducted in recent years reveal an increase in suicide rates for adolescents and young adults.[37] A higher proportion of older people in Australia complete suicide while a higher proportion of younger persons attempt it.[38]

The studies of spatial distribution of suicide show that in general the inner city areas have higher suicide rates. Until recently inner city areas in the main metropolitan areas tended to attract certain groups of people such as the elderly, unemployed, transient, divorced or separated because of cheap housing. As these groups tend to be more prone to suicide, the areas in which they concentrate tend to have higher suicide rates. With increasing gentrification of the inner city areas, especially in Sydney, Melbourne, Adelaide and Brisbane this pattern may change in future.[39] Suicide is also found to be associated with social isolation. Other people living alone in urban areas are found to be more suicide prone than those who live in a family situation.[40]

Methods of suicide are frequently categorized as violent and non-violent. Non-violent methods usually mean self poisoning and violent methods include those involving physical violence such as shooting, cutting and piercing, hanging, jumping from high places and deliberate acts of self destruction through motor

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36. Burvill, P.W. 1970, 'Age-sex variations in suicide in Western Australia 1901-1967' *The Medical Journal of Australia*, pp. 1113-16; Clifford and Marjoram, op. cit.
37. Kosky, R. Dorsch, M.M. and Roder D.M. 1983, 'A comparison of Australian suicide rates in 1969-73 and 1976-80', *Australian and New Zealand Journal of Psychiatry*, 17, pp. 254-7; Goldney and Dunvill, op. cit.; Hetzel, B.S. 1971, 'The epidemiology of suicidal behaviour in Australia', *Australian and New Zealand Journal of Psychiatry*, 5, pp. 156-166; Snowdon, J. 'Suicide in Australia - a comparison with suicide in England and Wales', *Australian and New Zealand Journal of Psychiatry*, 13, pp. 301-307.
38. Krupinski, J., Polke, P. and Stoller, A. 1965, 'Psychiatric disturbances in attempted and completed suicides in Victoria during 1963', *The Medical Journal of Australia*, 11, pp. 773-9.
39. Burnley, I.H. 1978, 'The ecology of suicide in an Australian metropolis; the case of Sydney', *Australian Journal of Social Issues*, 13, pp. 91-103; Clifford and Majoram, op. cit,; Kolher, K.M. and Cotgrove, R.C.M. 1976, 'Social geography of suicidal behaviour in Hobart', *Australian and New Zealand Journal of Psychiatry*, 10, pp. 237-42.
40. Chynoweth, R., Tonge, J.I., Armstrong. J. 1980, 'Suicide in Brisbane; a retrospective psychosocial study', *Australian and New Zealand Journal of Psychiatry*, 14, pp. 37-45; Edwards, J.E. and Whitlock. F.A. 1968, 'Suicide and attempted suicide in Brisbane, *The Medical Journal of Australia*, 1, 932-38; Lindsay, J.S.B. 1978, 'Australian suicidology', *Australian and New Zealand Journal of Psychiatry*, 12, pp. 175-80.

or air crashes. A number of studies have found that violent methods tend to be common among younger persons and among men, whereas non-violent methods are commonly used by older persons and women.[41]

Subsequent to a spate of suicide by jumping from high buildings in South Australia between 1980 and 1984, Goldney[42] studied a small and highly selective sample of these suicides who had an association with a psychiatric hospital. All those who had jumped had a schizophrenic illness. No other study has yet attempted to associate method and cause of suicide.

Self poisoning and drug overdose have been the focus of several Australian studies. The findings have revealed a close link between a significant rise in the prescribing of barbituates and other sedatives in the 1960s and suicide rates. But other studies have failed to confirm this relationship. The general conclusion of research on the subject appears to be that the prescribing pattern by physicians may have contributed to fluctuation in the suicide rate in Australia and that changing prescribing patterns influence the type of drug ingested in suicide. Furthermore, the packaging of individual drugs in cellophane or tin foil may have affected the number of impulsive suicides.[43] Similar findings have been reported in relation to domestic gas poisoning in Sydney.[44] Most of these studies relate to suicide management aspects rather than to the aetiological or epidemiological aspects.[45] Although over the past one hundred years there has

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41. Goldney, R.D. and Burvill, P.W. 1980, 'Trends in suicidal behaviour and its management', *Australian and New Zealand Journal of Psychiatry*, 14, pp. 1-15; Harvey, P.M. and Solomons B.J. 1983, 'Survival after free falls of 59 metres into water from Sydney Harbour Bridge, 1930-1982.', *The Medical Journal of Australia*, 28, pp. 504-511; Edwards and Whitlock, op. cit; Minogue, op. cit.; Knibbs op. cit.; Saint, E.G. 1964, 'Suicide in Australia', *The Barton Pope Lectures on Mental Health*, Adelaide, August.
42. Goldney, R.D. 1986 'A spate of suicide by jumping', *Australian Journal of Social Issues*, 2, pp.119-125.
43. For a general discussion of these issues see Goldney and Burvill, op. cit.; Clifford and Majoram, op. cit.; Arnold, P.C. 1972, 'Rise and fall of suicide rates in Australia: relation to sedative availability', *The Medical Journal of Australia*, 2, p. 1149; Whitlock. F.A. 1975, 'Suicide in Brisbane, 1956 to 1973: the drug death epidemic', *The Medical Journal of Australia*, 1, pp. 737-743.
44. Snowdin, J., op. cit.
45. Wade. D.N., 'The background pattern of drug usage in Australia', *Clinical Pharmacology and Therapeutics*, 19,5, (Part 2), pp. 651-656.

been a significant change in the methods of suicide the elimination of one or more method is not generally found to significantly affect the incidence of suicide.

A number of psychiatric studies about the aetiology of suicidal behaviour have found significant but predictable relationships with depression, alcoholism, physical and mental illness. One general conclusion which seems to be drawn from this relationship between suicidal acts and psychiatric disorders is that suicide is symptomatic of psychiatric illness rather than anti social behaviour.[46] The relationship between pre-existing psychiatric disorder(s) and suicide has been questioned on methodological as well as on theoretical grounds in some recent studies which have emphasized multi-faceted causality of suicide. This view is summarised in a recent study by Chynoweth and his associates.[47] 'Investigations into the cause of suicide have shown that there are many contributing factors which interact with each other to form a complex matrix of biological, social and psychological variables'. More recently Davis and Schruder have provided a useful overview of dominant view of suicide in Australian psychiatry. This is presented in Table 2.1 below.[48]

46. Duncan, op. cit.; Derrick, op. cit.; Krupinski, Polke and Stoller, op. cit.; Goldney 1985, op. cit.; Medlicott, 1969?
47. Chynoweth, Tonge and Armstrong, op. cit.
48. Davis, A.T. and Schrueder, C. 1990, 'The prediction of suicide', *The Medical Journal of Australia*, 153, p. 5.

Table 2.1:
Psychiatric Illnesses in Completed Suicides

Study (number of subjects)	Affective disorder	Alcohol dependence	Schizophrenia	Other diagnoses	Total
Robins et al.[49] (134)	55%	28%	2%	9%	94%
Dorpat and Ripley[50] (114)	30%	27%	12%	31%	100%
Barraclough et al.[51] (100)	70%	15%	3%	5%	93%
Kraft and Babigian[52] (179)	37%	11%	27%	16%	91%
Chynoweth et al.[53] (135)	45%	20%	4%	19%	88%
Rich et al.*[54] (283)	44%	54%	3%	80%	91%

* Multiple Diagnoses included

In summary, Australian studies of suicide vary in their objectives, scope and underlying assumptions. Most of the studies have been conducted by psychiatrists, and physicians, published in medical journals and view suicide as a form of psychiatric illness. A few studies which have examined the problem from a socio-cultural perspective appear to be in broad consensus with Durkheim's findings. More than a century has passed since Durkheim's imaginative and provocative treatise on suicide was first published. It still remains a milestone in suicide research and continues to provoke debate among researchers and continues to dominate the sociological perspective. As stated in the previous chapter the theoretical orientation which has guided the data collection and analysis of this study has been strongly influenced by Durkheim's pioneering work. The intention of this study however is not to dispute the psychogenic or

49. Robins, E., Murphy, G.E., Wilkinson, R.H., et al. 1959, 'Some clinical considerations in the prevention of suicide based on a study of 134 successful suicides', *American Journal of Public Health*, 49, pp. 888-899.
50. Dorpat T.L., Ripley H.S. 1960, 'A study of suicide in the Seattle area', *Comparative Psychiatry*, 1, pp. 349-359.
51. Barraclough, B.M., Bunch, J., Nelson, B., Sainsbury, P. 1974, 'A hundred cases of suicide: clinical aspects', *British Journal of psychiatry*, 125, pp. 355-373.
52. Kraft, D.P., Babigian, H.M. 1976, 'Suicide by persons with and without psychiatric contacts', *Arch Gen Psychiatry*, 33, pp. 209-215.
53. Chynoweth, R., Tonge, J.I., Armstrong, J. 1980, 'Suicide in Brisbane - a retrospective psychosocial study', *Australian and New Zealand Journal of Psychiatry*, 14, pp. 37-45.
54. Rich, C.L., Young, D., Fowler, R.C. 1986, 'San Diego suicide study, 1: young vs old subjects', *Arch Gen Psychiatry* 43, pp. 577-582.

biogenic factors but to highlight the importance and, in my opinion, primacy of socio-genic factors in the aetiology of suicidal behaviours in Australia.

CHAPTER 3

SUICIDE TRENDS IN AUSTRALIA

The overall suicide rate in Australia since the middle of the last century has remained remarkably constant, although numbers of suicides have increased almost sevenfold. In 1860, the year for which reliable data is available, this rate was 10.4 per 100,000 population. In 1985 it stood at 11.0 per 100,000. In 1990 it had registered a small increase and was 12.6 per 100,000 population. Another interesting feature as shown in Table 3.1 below is that compared with some of the major European countries and Japan, the Australian suicide rate has remained in the middle range in the last one hundred years.

Table 3.1

Suicide Rate for Selected European Countries, Australia and Japan 1886-1985

	1886	1975	1980	1985*
Ireland	2.4	3.4	6.3	8.0*
Italy	5.0	5.7	7.4	7.4*
Scotland	5.8	8.0	10.0	11.1
Finland	4.0	23.0	25.7	24.6
Netherlands	5.6	8.6	10.1	11.3
Norway	6.7	9.1	12.4	14.1
England and Wales	7.9	7.9	8.8	8.7*
Australia	11.6	12.2	11.0	11.0*
Belgium	11.9	15.6	22.1	23.8*
Sweden	11.8	20.5	19.4	18.2
Austria	16.0	23.3	25.7	27.7
Hungary	10.8	37.3	44.9	44.4
Japan	15.9	16.2	17.6	19.4
Germany**	20.5	20.8	20.9***	20.7***
Denmark	26.1	24.0	31.6	27.8
France	21.6	15.6	19.4	22.0*
Switzerland	22.1	19.7	23.5('81)	25.0

Source. G. H. Knibbs, 'Suicide in Australia: A Statistical Analysis of the Facts', Journal of Royal Society of New South Wales, XLL(45) 1912, and the U. N. Demographic Year Book, various years.

* or latest available figures

** Rate for German Empire

*** Rate for FRG (data not available for GDR)

The relative stability in the suicide rate over the last one hundred years as with its actual level would appear to suggest that notwithstanding the enormous social, economic and demographic changes which have occurred in Australia in this period, the society's social framework has remained relatively cohesive. The social institutions which regulate social life have changed but still continue to play an integrative role. Individuals have been cushioned from the disruptive effects of societal change through social innovations such as the social security system and cultural patterns which emphasize mateship, equality and an easy going life style. The statistics presented in Table 3.1 clearly contradict the widely held perception that the social change has been disruptive and injurious to societal health. This is not to deny that social change has had no disruptive effect at all but to the extent one can take suicide rate as a surrogate for relative social health and wellbeing Australia has faired much better than most European countries and Japan over the past hundred years.

Notwithstanding this outward stability, suicide rates have fluctuated over the years and these fluctuations appear to be related to economic cycles and other aspects of social structural change. For example, increases in the late 1880s were related to speculative silver and land booms. Similarly an increase in the late 1890s was related to economic depression and the associated problems of collapse of the land boom, bank failure and periods of serious droughts in Australia.[1]

Commenting on fluctuations in the suicide rate in the nineteenth century, the Commonwealth Statistician G. H. Knibbs noted in 1910 that: 'probably social and economic conditions are the most potent factors governing the phenomenon of suicide'.[2]

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1. Knibbs, G.H. 1911, 'Suicide in Australia: a statistical analysis of the facts', *Journal and Proceedings of the Royal Society of New South Wales*, pp. 225-246.
2. ibid, p. 231.

Emile Durkheim in his work on suicide made similar but more analytical observations. Any dramatic increases or decreases in wealth, he opined, diminishes social regulations and consequently results in anomie. He specifically states that in a 'Crisis of prosperity':

> The scale [regulating needs] is upset; but a new scale cannot be improvised ... One no longer knows what is possible and what is not, what is just and what is unjust, which claims and expectations are legitimate and which are immoderate. As a result, there is no limit to men's aspirations ... appetites, no longer restrained by a disorientated public opinion, no longer know where to stop ... [Moreover] because prosperity has increased, desires are heightened ... But their very demands make it impossible to satisfy them. Over-excited ambitions always exceed the results obtained, whatever they may be, for they are not warned that they must go no further. Nothing, therefore, satisfies them and all this agitation is perpetually maintained without abatement. Above all, since this race toward an unattainable goal can afford no other pleasure than the race itself, if pleasure it is, once it is interrupted, one is left quite empty-handed. At the same time, the struggle grows more violent and painful, both because it is less regulated and because the competition is more keen. All classes are set against one another because there is no longer any established classification. Effort grows just when it becomes least productive. How, in these conditions, can the will to live not weaken?[3]

Trends in the Twentieth Century

Given Durkheim's theory, which postulates a relationship between suicide and 'social facts' or social climate within the society to which the individuals belong, one would expect that fluctuations in suicide rates would be associated with changes in social conditions which affect the degree of social integration within society.

The data available since 1900 lends itself to such an analysis. Table 3.2 and Figure 3.1 provide a profile of male and female suicide trends as well as male-female suicide ratio since 1900. The data shows that male suicide rates for 1901 and 1985 are remarkably similar: 17.4 and 18.2 per 100,000 population. But in 1990 it had increased to 20.3 per 100,000 population. At the same time the data also shows some major fluctuations in the intervening years.

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3. Durkheim, *Suicide*, *op.cit.*, p. 211.

Table 3.2
Suicide in Australia 1880-1990

	Number			Rates		
Year	Males	Females	Persons	Males	Females	Persons
1880	208	36	244	17.5	3.6	11.1
1885	222	41	263	15.5	3.4	9.9
1890	n.a.	n.a.	338	n.a.	n.a.	10.9
1895	n.a.	n.a.	421	n.a.	n.a.	12.2
1900	343	78	421	17.4	4.4	11.3
1905	431	89	520	20.7	4.6	13.0
1910	432	84	516	19.1	4.0	11.8
1915	537	122	659	20.9	5.0	13.2
1920	516	120	636	18.9	4.6	11.9
1925	569	131	700	18.8	4.5	11.8
1930	791	152	943	24.0	4.8	14.6
1935	612	181	793	17.9	5.5	11.8
1940	559	173	732	15.7	5.0	10.4
1945	394	173	567	10.6	4.7	7.7
1950	567	193	760	13.8	4.8	9.3
1955	701	245	946	15.1	5.4	10.3
1960	778	314	1092	15.0	6.2	10.6
1965	1075	610	1685	18.7	10.8	14.8
1970	1076	475	1551	17.1	7.6	12.4
1975	1050	478	1528	15.1	6.9	11.0
1980	1199	408	1607	16.3	5.5	10.9
1985	1428	399	1827	18.2	5.1	11.6
1990	1735	426	2161	20.3	5.0	12.6

Source: Australian Bureau of Statistics, Suicide in Australia, Cat. No. 3309.0, Canberra, April 1983, and special data tabulations.

The male suicide rate in Australia since the 1900s appears to be associated with social factors such as the two World Wars and the Great Depression of the 1930s. During the Depression, Australia experienced a very high unemployment rate and a very dramatic increase in the male suicide rate (to 24 per 100,000 population in 1930). Female suicide rates were not affected to the same degree. A possible sociological explanation of this difference is the differential impact of unemployment on male and female family roles. The high unemployment during the depression seriously eroded the customary male role

MALE AND FEMALE SUICIDE RATES

AUSTRALIA 1901–90

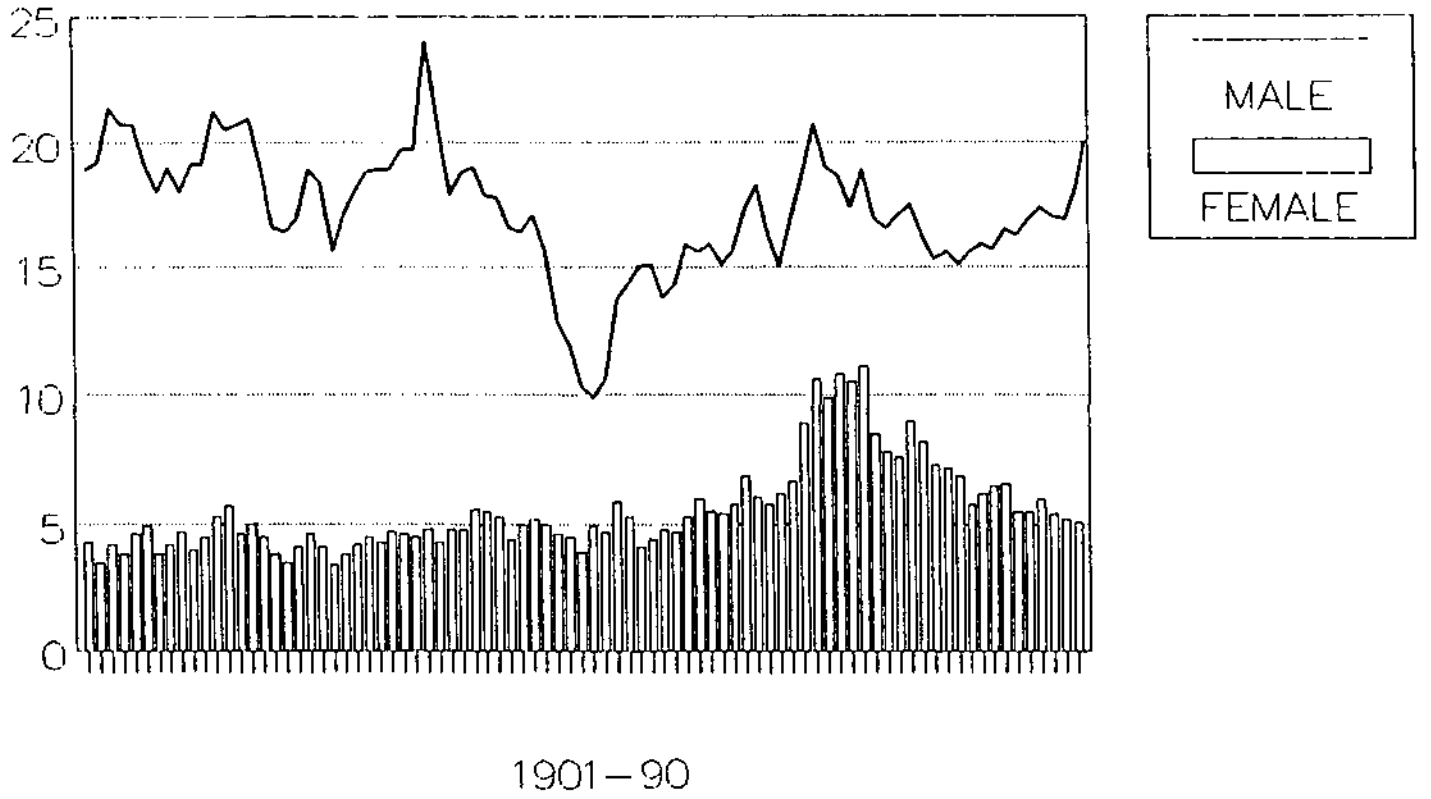

Figure 3.1

as the economic provider of the family, whereas the traditional family roles such as mother and housewife became even more important. The increase in the suicide rates in the boom years of the 1960s and years of high inflation in the 1970s also commented upon by Burvill[4] support Durkheim's formulation of the effects of economic cycles on suicide rates.[5]

The female suicide rate increased from 4.3 to 5.0 per 100,000 population between 1901 and 1990. The fluctuations in these rates have been more complex. Although female rates also experienced very slight declines during the two World Wars and a very slight increase during the Depression, their rates continued to increase gradually through the 1950s and 1960s, registering a peak of 10.8 per 100,000 in 1965. After 1965, the female suicide rate declined dramatically back to previous levels. By 1985, it had declined by over 50% from its peak in 1965. The increases in the female suicide rate in the 1960s (and also in the male suicide rate, which did not increase as dramatically) coincides with the period of large-scale British and European immigration to Australia.[6]

It was also the period in which female labour force participation began to increase noticeably. Possibly, participation in the labour force has not made women more prone to suicide. It may have made concealment of suicide by the family more difficult because of their entry into the public domain. It is not possible yet to establish this empirically, but one can speculate that this may have partly contributed to the increase in female suicide rates in the 1960s.

The empirical evidence in Australian studies has strongly indicated that increased suicide rates in the 1960s were predominantly due to the increase in the rates of ingestion of solid and liquid substances - overdosage of drugs.[7]

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4. Burvill P.W. 1980, 'Changing patterns of suicide in Australia, 1910-1977', *Acta Psychiatrica Scandinavia*, Vol. 62, pp. 258-268.
5. Pierce, A., 'The economic cycle and the social suicide rate', *American Sociological Review*, Vol.74, pp. 457-462.
6. Price, C.A. 1975, *Australian Immigration: A Review of the Demographic Effect of Postwar Immigration on the Australian Population*, Australian Government Printing Service, Canberra.
7. Burvill 1980, op. cit.

Oliver and Hetzel have attributed this increase to the greater availability of hypnotic and sedative drugs following changes in the pharmaceutical provisions of the National Health Act in 1959. Their evidence showed that subsequent changes to the Act in 1967, which drastically restricted the ready availability of these drugs, was the cause of the marked fall in suicide by drug overdosage after that date.[8]

Other possible reasons advanced for this increase include the movement for women's rights and women's liberation which in the short term result in situations of ambiguity, uncertainty and conflict[9], increased drug and alcohol abuse[10] and increased immigration.[11] These factors, however, do not explain a steady and significant fall in the total as well as in the age-specific suicide rates of females since 1971. This trend and its causes require further analysis which will be undertaken in the next chapter.

Some recent studies have suggested that besides economic cycles a number of other social factors such as degree of societal modernization, divorce rate, welfare transfers, urbanization, female participation in the labour force and war are significantly correlated to fluctuations in the suicide rates in modern societies.[12] In order to ascertain whether there was a statistically significant relationship between these factors and fluctuations in suicide rates of men and women in Australia a multiple regression analysis was undertaken. The multiple regression equations were estimated by ordinary least-squares using the

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8. Oliver, R.G. & Hetzel, B.S. 1972, 'Rise and fall of suicide rates in Australia: relation to sedative availability', *Medical Journal of Australia*, 11, 919-923.
9. Burvill, op.cit; French, L. and Bryce, F.O. 1978, 'Suicide and female agression: a contemporary analysis of anomic suicide', *Journal of Clinical Psychiatry*, 22, pp. 195-97.
10. Snowdon J. 1979, 'Suicide in Australia - a comparison with suicide in England and Wales', *Australian and New Zealand Journal of Psychiatry*, 13, pp. 301-307.
11. Hassan, R. 1983, *A Way of Dying: Suicide in Singapore*, Oxford University Press, Kuala Lumpur; Whitlock, F.A. 1971, 'Migration and suicide', *Medical Journal of Australia*, 2, pp. 840-48; Kushner, H.I. 1984, 'Immigrant suicide in the United States towards a psycho-social history', *Journal of Social History* 18, pp. 3-24.
12. Hassan, R. and Tan, G. 1989, 'Suicide trends in Australia, 1901-1985: an analysis of sex differentials', *Suicide and Life-Threatening Behavior*, 19, 4. pp. 362-380; Stack, S., and Danigelis, N. 1985, 'Modernization and sex differentials in suicide, 1919-1972', *Comparative Social Research*, 8, pp. 203-216.

Cochrane-Orcutt iterative procedures to correct for first-order social correlations of the residuals. The results of this regression analysis are presented in Tables 3.3 and 3.4 below.

Table 3.3

Sociological Correlates of Female Suicide Rates in Australia, 1901-85

Dependent variable: Female suicide rate

	1	2	3	4
MODERN	0.0026			
	(0.0107)			
URBAN		0.2489**		
		(1.7378)		
FPRATE			-0.1057	
			(-0.8078)	
UNEMPL	-0.0022	0.0123	-0.0015	0.0046
	(-0.0424)	(0.2410)	(-0.0289)	(0.0930
DIVORCE				-0.0388*
				(-2.0697)
WAR	-0.1027	-0.0539	-0.1006	-0.1108
	(-0.2668)	(-0.1399)	(-0.2652)	(-0.2946)
TIME	0.0338	-0.0716	0.0556**	0.0539
	(0.4355)	(-1.0963)	(1.6236)	(2.3675)
ADJUSTED R^2	0.8270	0.8316	0.8287	0.8358
F (5,78)	80.3715*	82.9539*	81.3284*	85.4717*
DW	1.7497	1.8711	1.9108	1.8715

Notes:

1. Constants not shown
2. Figures in parentheses are t values (?)
3. * indicates significant at 0.05
4. ** indicates significant at 0.10
5. MODERN = Modernization index
6. URBAN = Urbanization rate
7. FPRATE = Female participation rate in labour force
8. DIVORCE = Divorce/Marriages
9. WAR = War dummy variable
10. TIME = Trend variable

Table 3.4

Sociological Correlates of Male Suicide Rates in Australia, 1901-85

Dependent variable: Male suicide rate

	1	2	3	4
MODERN	0.5814*			
	(2.3739)			
URBAN		0.3161		
		(1.2464)		
FPRATE			0.1863	
			(1.1416)	
DIVORCE				-0.0151
				(-0.4343)
UNEMPL	0.1637**	0.1646	0.1197	0.1262
	(1.8668)	(1.5964)	(1.2935)	(1.2863)
WAR	0.7032	0.7900	0.7202	0.7780
	(1.0203)	(1.1162)	(1.0298)	(1.1062)
TIME	-0.2053*	-0.1657	-0.0575	-0.0169
	(-2.6437)	(-1.4186)	(-1.4326)	(-0.4447)
ADJUSTED R^2	0.7353	0.7274	0.7265	0.7233
F (5,78)	47.1787*	45.2854*	45.1023*	44.3941*
DW	1.8185	1.8483	1.8495	1.8723

Notes: as for Table 3.3

The analysis of data for female suicides (Table 3.3) shows that, with the possible exception of the urbanization rate (whose regression coefficient is positive and significant at the 0.10 level) the female suicide rate is not correlated with the various variables. None of the other explanatory variables is statistically significant, with the exception of the divorce rate, which shows a strong, inverse relationship with the female suicide rate. Possible reasons for this inverse relationship will be discussed below. The data reported in Table 3.4 shows that, the male suicide rate is significantly correlated (at 0.10) with the rate of unemployment in equation 1, but this is not the case with the divorce rate which fails to show any significant relationship.

The most interesting feature of these results is the strong inverse correlation between the divorce rate and the female suicide rate in Australia.

This contradicts the findings reported in some of the recent American studies.[13] One possible explanation for this is that with increasing female emancipation over time divorce is no longer regarded as a social stigma. In addition, the increasing participation of women in the labour force, and increased government and community support for single parents in Australia, means that the financial burden associated with divorce may not be as great for women as it was in the past. This is particularly relevant for Australia, since the election of the Whitlam Labour Government in the early 1970s coincided with falling female suicide rates over a period when divorce rates were increasing substantially. The following chapter will deal with these issues in greater detail.

The evidence documented and analyzed in this chapter reveals that in Australia the male suicide rates are related to the economic cycles. The analysis also confirms the expected positive relationship between unemployment and male suicide rates. The female suicide rates on the other hand appear to be influenced by changes in their social and economic status over the past 50 years.

The findings reported here provide general support for Durkheim's hypothesis relating to the economic cycle and suicide rates in that economic crisis has an aggravating effect on the suicidal tendencies. But he was perceptive enough not to ignore the complexity of this relationship and qualified his observation by suggesting that 'whenever serious readjustments take place in the social order, whether or not due to sudden growth or an unexpected catastrophe, *men* are more inclined to self-destruction'.[14] Furthermore it is not only the economic 'declassement' that leads to suicide. Other anomie producing

13. Jacobson, G.F. and Portuges, S.H. 1978, 'Relation of marital separation and divorce to suicide: a report', *Suicide and Life-Threatening Behavior*, 8, pp. 217-24; Stack, S. 1980, 'The effects of marital dissolution on suicide', *Journal of Marriage and the Family*, 42, pp. 83-92; Wasserman, I.M. 1984, 'A longitudinal analysis of the linkages between suicide, unemployment and marital dissolution', *Journal of Marriage and the Family*, 46, pp. 853-59. But in a paper which has been published in 1991, Lester and Yang after comparing Australian and American suicide rates for males and females confirm the findings reported above, see Lester, D. & Yang, Bijou 1991, 'The relationship between divorce, unemployment and female participation in the labour force and suicide rates in Australia and America', *Australian and New Zealand Journal of Psychiatry*, 25, pp. 513-519.

14. Durkheim, op.cit., p. 247.

situations such as widowhood (domestic anomie) and divorce (conjugal anomie) also contribute to suicide. In so far as the general purpose of social theory is to assist in organizing the empirical facts and then provide a set of plausible explanations for the observed patterns of empirical observations, Durkheim's theoretical propositions about the links between changes in economic and social regulations and suicide rates are very valuable analytical tools as the empirical data and its interpretation reported in this chapter have demonstrated.

CHAPTER 4

GENDER AND SUICIDE

Women in Australia, as in other countries, tend to suicide less frequently than men. However, while the female suicide rate has remained lower compared with that of males, the ratio of male to female suicide has altered and fluctuated significantly between 1901 and 1990. This change is described in Figure 1. In 1901, for every female suicide there were about 4.5 male suicides. This ratio fell over the years. By 1965 there were fewer than 2 male suicides for every female suicide. Thereafter, as Figure 4.1 shows, the ratio has increased to 2 male suicides for every female suicide in the 1970s, and to 3 male suicides for every female suicide in the 1980s.

The gender differences and the changing patterns in the male-female suicide ratio and other forms of deviant behaviour, such as alcoholism, crime and drug addiction, have become important foci of sociological inquiry in recent years.

Two major theses have been advanced to account for these differences. The first has focused on the relationship between women's emancipation and deviant behaviour. Its proponents argue that the increasing opportunities, temptations, challenges, stresses and strains to which women are subjected in modern societies in recent years have caused them to act, or react in a manner not previously experienced to the same extent and, strikingly, more in the manner men have reacted to the same stimuli. This thesis postulates that if this trend were to continue in the future the differences in male-female suicide rates will narrow.[1]

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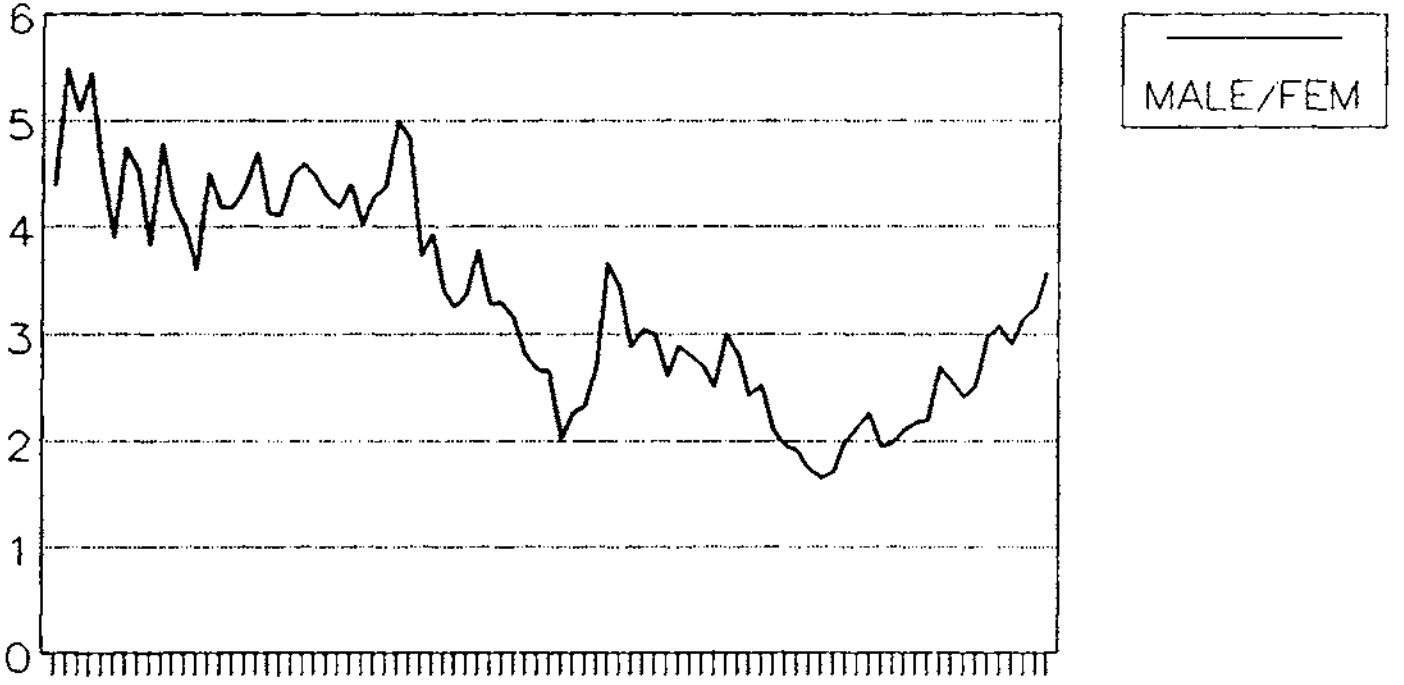
1. Adler, F. 1975, *Sisters in Crime*, McGraw Hill, New York; Adler, F. (ed.) 1984, *The Incidence of Female Criminality in the Contemporary World*, New York University Press, New York; Adler, F. and Simon A.J. 1979, *Criminology of Deviant Women*, Houghton Miffline, Britain; Austin, R. 1982, 'Women's liberation and increase in minor, major and occupational offences', *Criminology* 20, pp. 417-430; Leonard, E., *Women, Crime and Society*, Longman; New York; Smart, C. 1976, *Women's Crime and Criminality*, Routledge and Kegan Paul, London; Stack, S. and Danigelis, N. 1985, 'Modernization and six differentials in suicide 1919-72', *Comparative Social Research*, 8, pp. 203-216.

MALE/FEMALE SUICIDE RATIO

AUSTRALIA 1901–85



1901–85

Figure 4.1

The other thesis advanced by feminist scholars has focused on power-control theory which suggests that mothers in patriarchal families are assigned roles in controlling daughters relatively, and consequently instrumentally, more than sons and this leads daughters to prefer risk taking less than do sons. Consequently it is suggested that gender differences in suicide and other forms of deviant behaviour are due to a sexual stratification in the social control of adolescents that is related to patriarchal family structures.[2]

The empirical evidence so far has not been conclusive. However, the debate has served the important function of structuring the subject of female suicide and other forms of deviant behaviour and has fundamentally altered the conventional view that female deviants were misguided children who had strayed from the appointed ways. The debate on whether or not females are innately more or less capable of committing suicide and other forms of deviant behaviour has given way to investigations of the socialization process or change thereof, which might affect the suicide and other crime rate.[3]

In a recent study of this problem, Stack and Danigelis[4] systematically explored the relationship between modernization and suicide in 17 industrialized countries. Their analysis indicated that increasing modernization in these countries was associated with a decline in the male-female suicide ratio. They

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2. Hagin, J., Simpson, J. and Gillis, A.R. 1985, 'The class structure of gender and delinquency: toward a power-control theory of common delinquent behaviour', *American Journal of Sociology* 90, pp. 1151-78; also see their 'Class on household: a power control theory of gender and delinquency', *American Journal of Sociology*, 92, 1987, pp. 788-816, and 'Feminist scholarship, relational and instrumental control, and a power-control of gender and delinquency, *The British Journal of Sociology* 39:3, 1988, pp. 301-377; Gilligan, C. 1982, *In A Different Voice*, Harvard University Press, Cambridge; Chodorow, H., 'Family structure and feminine personality', in *Women, Culture and Society*, eds M.Z. Rosalto and L. Lamphere, Stanford University Press, Stanford.
3. Adler 1984, op.cit.; Cullen, E.T., Calden K.N., Cullen, J.B. 1979, 'Sex and delinquency', *Criminology* 17, pp. 301-310; Jensen, G.F. and Eve, R. 1976, 'Sex differences and delinquency: an examination of popular sociological explanations', *Criminology*, 13, pp. 427-448; Norland, S. and Sharen, N. 1977, 'Gender roles and female criminology: some critical comments', *Criminology*, 15, pp. 1987-204; Hagen, Simpson and Gillis 1988, op.cit.; Giordonia, C. and Cenkowich, S.A. 1979, 'On amplicating the relationship between liberation and delinquency', *Social Problems*, 26, pp. 467-81.
4. Stack and Danigelis, op.cit.

used in order to de-trend the data series. The Cochrane-Orcutt procedure was used to correct for first-order serial correlation in the residuals.

Figure 4.2

FEMALE PARTICIPATION AND URBANIZATION

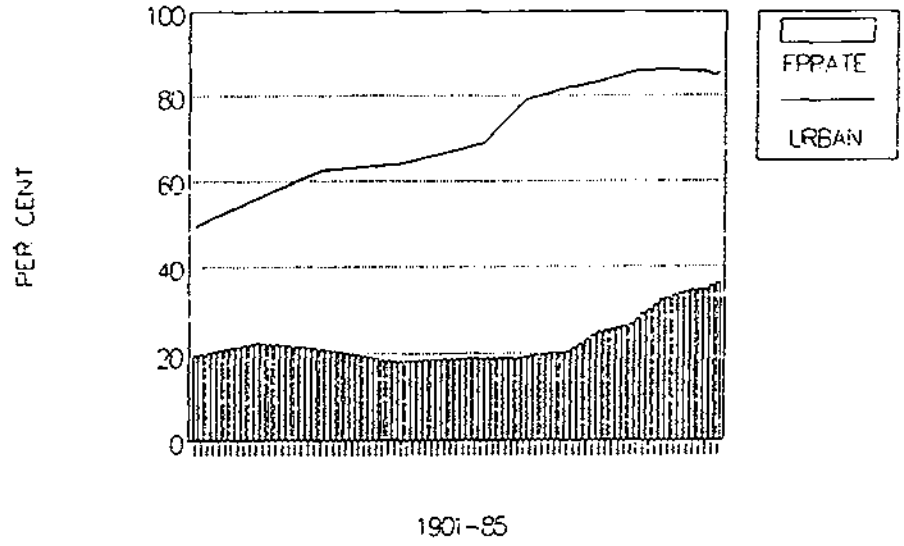


Figure 4.3

FEMALE-MALE EDUCATION RATIO

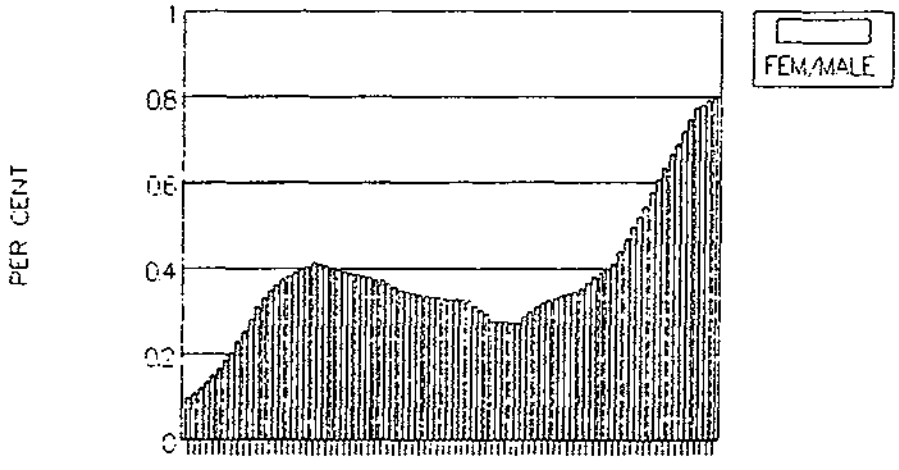
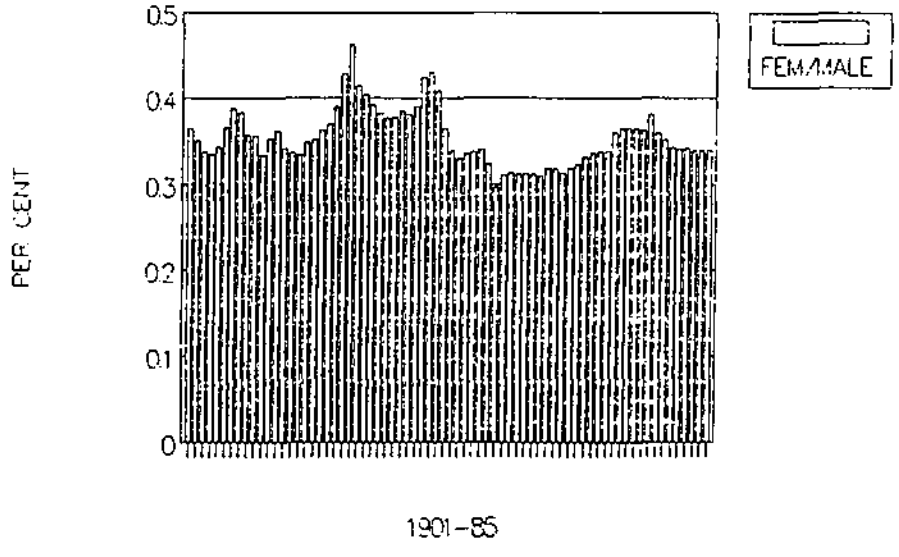


Figure 4.4

FEMALE–MALE EMPLOYMENT RATIO



Main Findings

The results of this analysis are presented in Table 4.1. The modernization index and the rate of unemployment were found to be positively correlated with the male-female suicide ratio (both regression coefficients were significant at 0.05). The war dummy variable was not significant from zero, while the trend variable was inversely correlated with the male-female suicide ratio (significant at 0.05). The four explanatory variables accounted for 85% of the variance in the male-female suicide ratio. These results, therefore, do not support Stack and Danigelis' hypothesis. Most likely this is due to inclusion of a time variable in the analysis in order to correct for trend. Stack and Danigelis[11] claim to have adjusted for trend by using the Cochrane-Orcutt procedure, but this procedure only corrects for serial correlation in the residuals. The usual method of

11. Stack and Danigelis, op.cit.

detrending time-series data is to include a time variable explicitly or to transform the variables into their deviations from trend.[12]

Table 4.1

Sociological Correlates: Male-Female Suicide Ratio (1901-1985)

Variable	Coefficient	T Ratio
MODERN	0.2449	2.2377*
UNEMPL	0.0520	2.2467*
WAR	0.0439	0.2206
TIME	-0.0068	-3.8733*
RBAR2	0.8518	
F (5.78)	96.4091*	
Dw	1.9649	

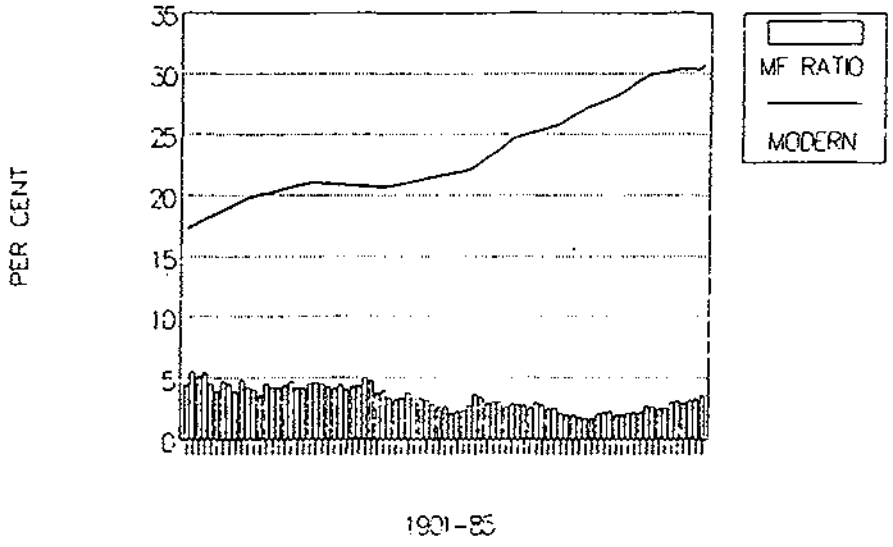
* Significant at 0.05

Comparison of Figures 4.5 and 4.6 below show that when the data are corrected for trend (Figure 4.6) there is a positive correlation between the modernization index and the male-female suicide ratio. When the modernization index is above its trend, the male-female suicide ratio is also above its trend. The significant negative correlation coefficient on the time variable indicates that, over the 1901-85 time period, there was a long-term decline in the male-female suicide ratio.

12. First-differencing, which is essentially what the Cochrane-Orcutt procedure does, only transforms the data by taking changes in adjacent observations. Changes in adjacent observations are not the same as deviations from trend, as the accompanying graph illustrates. While the graph of first-differences appears to be stationary, this need not always be the case, since if the original data were, for example, increasing exponentially, the first-differences will also show an upward trend, as each first-difference will be larger than the previous one. In the case of our data on suicides, the accompanying graph clearly shows that taking first differences of the male-female suicide ratio produces a markedly different data series compared with taking deviations from trend. Using the Cochrane-Orcutt procedure, or taking first-differences therefore do not amount to detrending the data series.

Figure 4.5

MF SUICIDE RATIO AND MODERNIZATION



However, closer examination of the data reveals that there is a distinct change in trend of the male-female suicide ratio after 1966. Prior to this date, the male-female suicide ratio exhibited a declining trend, but after this date, it exhibited a rising trend (Figure 4.6). The reason for this break in trend appears to be that prior to the mid-1960s, the male suicide rate in Australia exhibited a declining trend, while the female suicide rate exhibited a rising trend. However, after about 1966, the female suicide rate fell steadily, while the male suicide rate began to increase steadily from about 1970. This is clearly shown in Figure 4.7 below. Another way of illustrating these patterns is shown in Figure 4.8. This plots the difference between the male and female suicide rates in Australia. It is clear from this figure that before 1965, the difference between the male and female suicide rates was diminishing, but between 1966 and 1985, the difference between these two suicide rates diverged steadily. Table 4.2 confirms this break in trend.

Figure 4.6 DEVIATIONS FROM TREND

MF SUICIDE RATIO AND MODERNIZATION

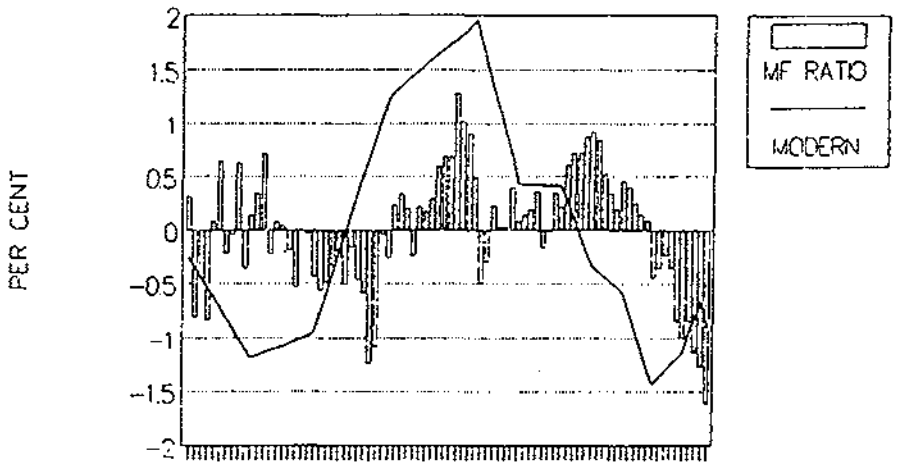


Figure 4.7

MALE AND FEMALE SUICIDE RATES

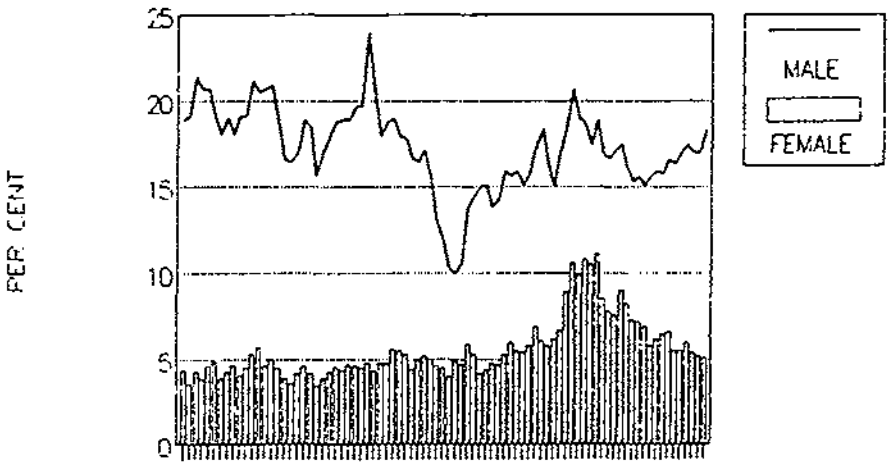


Figure 4.8

MALE AND FEMALE SUICIDE RATES (DIFF)

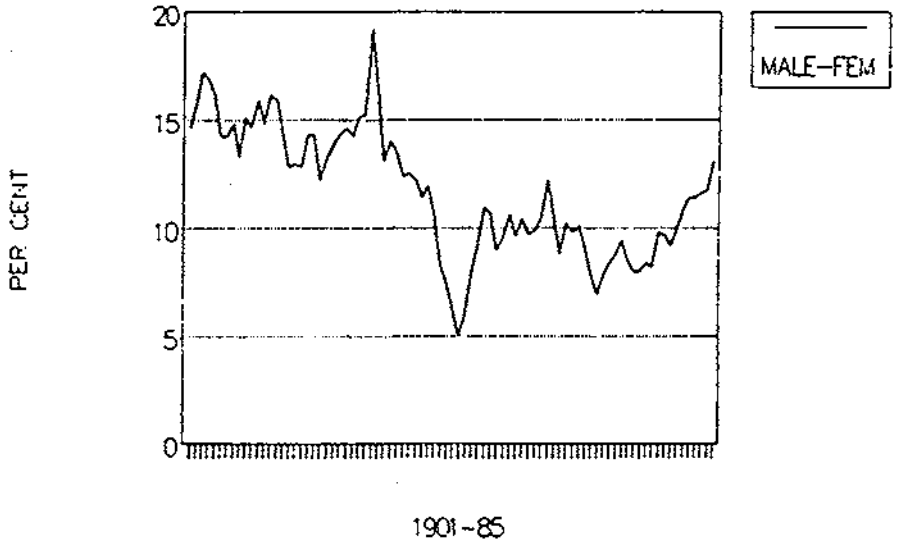


Table 4.2

Sociological Correlates: Male-Female Suicide Ratio (1901-65 and 1966-85)

Variable	Coefficient	T Ratio
	(1901-65)	
CONST	16.8733	11.1476*
TIME	-0.1345	-3.6625*
RBAR2	0.8254	
F (2.61)	149.9623*	
Dw	1.8176	
	(1966-85)	
CONST	-10.7953	-1.8576
TIME	0.2078	3.6092*
RBAR2	0.8338	
F (2.16)	46.1367*	
Dw	1.5529	

* Significant at 0.05

Sociological Significance of the Findings

There are several possible reasons for the divergent patterns in the suicide rates for men and women in Australia. The downward trend in the male suicide rate from 1901 to 1965, as mentioned in the previous chapter, is likely to be a reflection of generally prosperous economic conditions, with rising incomes and standards of living. However, from the mid-1960s, economic conditions began to deteriorate, with rising unemployment and falling real incomes becoming a feature of the period from the early 1970s onwards. This coincided with a steady rise in the male suicide rate. The female suicide rate exhibited a steadily rising trend up to the mid-1960s. This is likely to be a reflection of the growing emancipation of women associated with increasing education and labour force participation, bringing with it all the pressures of modern industrial life. To this extent, the data support the thesis that increasing modernization is associated with a rise in the female suicide rate.

It is also possible that participation in the labour force did not make women more prone to suicide. It simply makes concealment of suicide more difficult because of their entry into the public domain. This statistical artefact may have contributed to some of the increase in the female suicide rate. Empirical evidence has also indicated that increased suicide rates in the 1960s were predominantly due to the increase in the rates of ingestion of solid and liquid substances - overdosage of drugs.[13] Oliver and Hetzel[14] attributed this increase to the greater availability of hypnotic and sedative drugs following changes in the pharmaceutical provisions of the National Health Act in 1959. Their evidence showed that subsequent changes in the Act in 1967, which restricted the ready availability of these drugs, was the 'cause' of the marked fall in suicide by drug overdosage after that date. Nevertheless, drug overdosage still

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13. Burvill, P.W. 1980, 'Changing patterns of suicide in Australia, 1910-1977', *Acta Psychiatrica Scandinavia*, 62, pp. 258-68.
14. Oliver, R.G. and Hertzel B.S. 1972, 'Rise and fall of suicide rates in Australia: relation to sedative availability', *Medical Journal of Australia*, 11, pp. 919-923.

remains the principal method of suicide amongst women in Australia. For example, in 1981 54% of suicides by females was due to self-poisoning.

Several possible explanations might account for this reversal in trend. As mentioned in the previous chapter the participation of women in the labour force increased significantly in the 1970s, leading to greater financial independence for women and greater ability to cope with the pressures of modern industrial life. One reason for this may be that by this time, the participation of women in the labour force had become an accepted social norm. Increasing participation of women in the labour force may therefore have been conducive to enhancing their social integration in society, thus reducing their suicide rate.

Another contributing factor may be related to marital status. This trend is remarkable given the fact that the number of single-parent families (which are usually headed by separated, or divorced women) have increased by 73% between 1974 and 1985, while the number of two-parent families with dependent children has increased by only 4.4%.[15] In Australia, the suicide rates of divorced, widowed and single persons have declined significantly since 1961.[16] It is also remarkable, given a recent analysis of the relationship between divorce and suicide in the United States which shows that, after controlling for numerous factors, a 1% increase in the divorce rate is associated with a 0.54% increase in the suicide rate.[17]

In the Australian context, it appears that structural and ideological factors have contributed towards falling rates of suicide amongst women since the late 1960s. At the ideological level, the changing meaning and mores about singlehood, widowhood and divorce may have affected the suicide rate of people within these categories positively. These changing meanings have been

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15. Department of Social Security 1986, *Social Security Review I*, Canberra.
16. Hassan, R. and Tan, G. 1989, Suicide trends in Australia 1901-1985: an analysis of sex differentials', *Suicide and Life-Threatening Behavior*, 19, p. 4. Also see Chapter 8.
17. Stack, 1980, op.cit.

accompanied at the structural level by welfare transfers from the state. While divorce and widowhood produce acute emotional and financial distress[18] the improved welfare transfers over the last 20 years may have contributed to a fall in the suicide rates amongst these groups. The reason for this is that welfare transfers tend to reduce some inequalities in society by improving the socio-economic status of disadvantaged groups including single-parents with dependent children who are mostly women.[19] This is probably one of the reasons for the gradual but significant decline in the female suicide rate in Australia since the mid 1960s, when these welfare transfers became significant and widespread in their coverage.[20]

After 1966, the female suicide rate fell steadily. Another factor contributing to reduced female suicide rates during the past two decades is related to improved methods of medical intervention. The ingestion of an overdose of drugs has been the most common method of attempting suicide amongst women. More than half of female suicide victims used self-poisoning whereas a large proportion of men used other methods such as gunshots.[21] Conversely, data from a large regional hospital in South Australia indicated that, during the three-year period between 1980 and 1982, 68% of patients treated for drug overdose at the Accident and Emergency centre were women. Data from the same hospital covering a six-year period, 1977-82, reveal that only three patients out of 512 who had overdosed were dead on admission and a further four died in intensive care. It is therefore likely that improved methods of medical intervention, through intensive care technology, and improved packaging procedures of certain drugs helped to control the number of female suicides by drug overdosage in recent years.

18. Stack, 1980, op.cit.; Wasserman, op.cit.
19. Treas, J. 1983, 'Trickle down or transfers? postwar determinants of family income inequality', *American Sociological Review* 48, pp. 546-60.
20. Australian Bureau of Statistics 1985, *Social Indicators Australia*, Canberra.
21. Australian Bureau of Statistics 1983, *Suicides: Australia 1961-81*, Canberra. Also, Cantor, Christopher & Lewin, Terry 1990, 'Firearms and suicide in Australia', *Australian and New Zealand Journal of Psychiatry*, 24, 500-509.

Returning to the central thesis, the evidence from Australia reported and discussed in this chapter reveals that the relationship between the male-female suicide ratio and modernization-female emancipation is a complex one. The long-term trend (1901-85) shows an inverse relationship. But under conditions of accelerated modernization and women's emancipation which have prevailed in Australia since the 1960s, the trend in the male-female suicide ratio has been declining since the mid-1960s, while the male suicide rate has been increasing. Some reasons for this change in the pattern of the male-female suicide ratio have been mentioned. One additional sociological aspect deserves some commentary, albeit of a speculative nature. Given the suicide trends since the 1960s, one might argue that the increasing pace of female emancipation has resulted in enhancing the status of women in society relative to men who may have consequently experienced status-loss. One can speculate that the high rates of unemployment since the 1960s and the relative status-loss experienced by men produced a social, psychological and economic climate which was conducive to an increase in their suicide rates.

CHAPTER 5

AGE AND SUICIDE

The incidence of suicide among various age groups in Australia has changed dramatically during the last one hundred years. Until 1964 age was positively related to suicide for men, i.e. the suicide rate increased significantly with age. This pattern was not as well defined in the case of women although their rates also tended to increase with age. Another striking difference between male and female suicide rates between 1891 and 1964 was that whereas males generally registered a decline in all age groups except those between 15 and 34 years, the female rate registered a substantial increase except among the teen age females. In short, until around 1964, suicide was primarily a problem among the older age groups. For every suicide committed by people under 25 years, there were over three suicides committed by people aged 50 years and above. By the 1960s, this picture had changed significantly. Suicide had increasingly slipped into the younger age groups (see Table 5.1)

Table 5.1

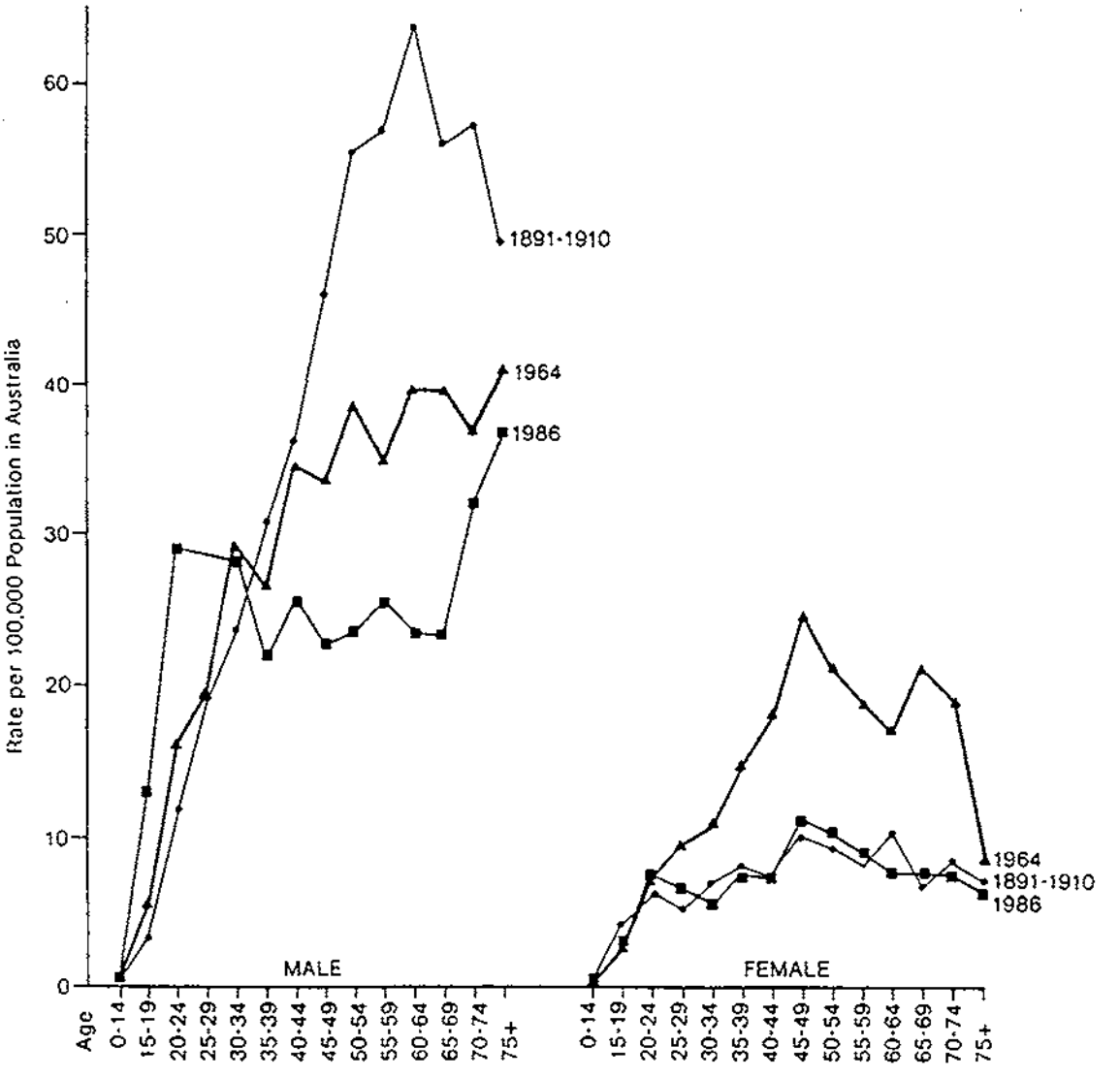
Suicide Rates per 100 000 Population in Australia 1891-1910, 1964, 1986 and 1990 by Sex and Age

Age	Male				Female			
	1891 1910	1964	1986	1990	1891 1910	1964	1986	1990
0-14	0.5	0.2	0.6	0.3	0.4	0.2	0.1	0.2
15-19	3.2	5.8	13.2	17.8	4.0	2.9	3.0	5.0
20-24	11.9	16.3	29.2	36.1	6.7	7.7	7.8	3.9
25-29	19.0	19.4	28.6	32.8	5.3	9.4	6.7	6.0
30-34	23.5	29.1	28.0	25.1	7.1	10.7	5.8	8.1
35-39	30.9	26.3	21.7	26.1	8.1	14.9	7.7	5.3
40-44	36.1	34.6	25.8	25.1	7.6	17.9	7.3	6.4
45-49	46.1	33.5	22.6	20.8	10.2	24.4	11.2	7.1
50-54	55.9	38.4	23.6	22.1	9.4	21.0	10.2	6.5
55-59	56.9	34.6	25.5	27.7	8.1	18.8	8.9	6.7
60-64	63.7	39.7	23.6	22.9	10.2	17.1	7.6	5.7
65-69	56.0	39.7	23.3	25.1	6.9	21.0	7.6	7.7
70-74	57.3	36.7	32.0	27.7	8.2	19.1	7.6	8.1
75+	49.1	40.0	36.7	31.8	7.0	8.5	6.2	8.2

Source: G.H. Knibbs, 'Suicide in Australia: a statistical analysis of the facts', Journal of Royal Society of New South Wales, XLL, 1912 and the Australian Bureau of Statistics, Canberra.

FIGURE 5.1

SUICIDE RATE PER 100,000 POPULATION IN AUSTRALIA



Since 1964 the trend in the male rate noted above has continued to accelerate. The suicide rate among young men has increased significantly and declined even more significantly among the older men. As for women the trend is slightly different. The suicide rate has remained stable among young women but declined very markedly among the older women. The data in Table 5.1 also shows that male suicide rates in 1986 and 1990 has a binomial distribution. It tends to peak in 20-24 years and again from 70 years of age onwards. Among women it continues to peak between 45-55 years until 1986. This period roughly corresponds to onset of menopause. In 1990 the female rates had registered a decline in the middle age years but increased among teenagers, 30 to 34 years

old and among women older than 65. This pattern is consistent partly with the patterns discussed in Chapter 5.

A closer examination of the age specific suicide rates reveals that between 1964 and 1990 the rate of suicide among men aged 30 years and above has registered a consistent decline, the magnitude of which becomes significantly and gradually more pronounced for older men. The picture for younger men was the reverse of this trend. The suicide rate has consistently increased for men aged 15-29 years. In the case of adolescent males (15-19 years) the rate has almost tripled between 1964 and 1990 and increased about six times since 1891. Among males aged 20-24 years the rate has doubled since 1964 and trebled since 1881. The rate for men aged 25-29 years has increased by almost 50 percent since 1964.

For adolescent females the rate declined between 1891 and 1964 and since 1964 has remained stable. The question is why suicide rates have risen among young men and declined among older persons.

In the case of young men, a partial answer may lie in improvements in data gathering procedures as well as the particular method of suicide used.[1] These days it may also be difficult for the family to conceal suicides. Furthermore, the method of suicide commonly used by young men, that is gunshot, is particularly lethal.

Another answer may lie in a posited link between rates of unemployment and suicide. A recent Australian study has suggested that unemployment rates amongst young males in recent years (1962-82) have positively influenced this particular group's level of suicide.[2] The study, after statistically examining the relationship between unemployment and suicide, concluded that 'unemployment ... does have a positive and statistically significant influence on suicide rates for

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1. Kosky, R. 1987, 'Is suicide behaviour increasing among Australian youth' *The Medical Journal of Australia*, 147, August.
2. Martina, A. 1985, *Suicide and Unemployment Amongst Young Australian Males 1966 to 1982*, Working Paper No. 56, Department of Economic History, Australian National University.

the various groups from 15 to 29 years'.[3] Similar findings have been reported by other overseas studies.[4]

Official data since 1961 show that the young men have experienced high unemployment rates. In the mid to late 1960s, unemployment rates were generally very low. In 1964, the rate of unemployment amongst males aged 15-19 years was 3.7 percent and amongst males aged 20-34 years, 0.09 percent. By 1972, the rate had risen to 5.6 percent amongst male youths aged 15-19 years, and 2.6 percent for men aged 20-24 years, although the overall unemployment rate for men that year was only 2.0 percent. By 1976, this trend had changed with rates for 12.7 percent and 6.5 percent for males aged 15-19 years and 20-24 years respectively. The overall male rate for 1976 was 3.9 percent.[5]

In the mid 1970s, men aged 25-34 years had unemployment rates lower than the average for all males, but still higher than that for the older age groups. This was particularly so in the 1980s, a period during which suicide rates amongst this particular age group were the highest in twenty years. In 1983, the rate of unemployment amongst men aged 25-34 years was 9.1 percent compared with a rate of approximately 6 percent for older men. In 1984, their unemployment rate was 7.6 percent compared with around 5 percent for men aged 35-59 years.[6]

It would appear that young women have been relatively protected against suicide compared with their male counterparts. This is despite very high rates of unemployment since 1975. This may be partly attributable to different socialization processes, as well as to some of the reasons discussed in Chapter 4 in relation to women in general. However, unemployment may be only one of the several factors such as increased drug and alcohol abuse, increased

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3. ibid.
4. For a review of literature on this issue see Platt, S. 1984, 'Unemployment and suicidal behaviour: a review of literature', *Social Sciences and Medicine*, 19, pp. 93-115. For a recent Australian study see Hassan and Tan, 1990, op.cit.
5. Department of Social Security 1987, 'Occupation', *Unemployed, Trends in Unemployment in Australia 1970 to 1986*, Canberra.
6. ibid.

immigration, which may have contributed to the increase in the suicide rates of young males.

A Statistical Analysis of Age and Suicide

As noted earlier there has been a significant change in the age specific rates of suicide in Australia. The data in Table 5.1 suggests that suicide proneness has significantly increased among the young and declined among the older in Australia since the 1960s. Before analyzing the reasons for this shift we first need to establish if this change is 'real' and not merely a statistical artefact. To ascertain this, a statistical analysis of the changes in the age specific suicide rates between 1964 and 1986 in Australia was undertaken. Using the suicide rates by five year age categories between 15 and 75 years for 1964-66 and 1984-86 an analysis was undertaken of the pattern of suicide proneness of different age groups.

The data were fitted to a log-linear model. In this model the log-odds is composed of a general 'base-line' term, a year effect and an age effect; more concisely Log Odds = base line + year effect + age effect. The data categorized by age and sex lends very well to this methodology.

The results of this analysis are reported in Tables 5.2 and 5.3 and show that for males the change in the rate of suicide from relatively low in younger age groups in 1966 to relatively high in 1986 is in indeed statistically significant as derived from the values of suicide odds. As for females the propensity to suicide in the age group 15 to 24 years had increased between 1966 and 1986 but notwithstanding a more complex pattern of change among other age groups the propensity to suicide has generally declined between 1966 and 1986 and that the change between 1966 and 1986 is statistically significant.

Table 5.2

Age and Suicide - Males: Log-odds for Various Age Groups 1966-86

Age	1966	1971	1976	1981	1986
15-24	0.6294	0.9823	1.0464	1.1477	1.998
25-29	0.9329	0.9159	1.0523	1.0295	1.0512
30-34	0.9849	0.9392	1.0907	0.9824	1.0036
35-39	1.1273	1.1008	1.1244	0.9281	0.8212
40-44	1.2293	0.8692	0.9717	1.0815	0.9146
45-64	1.2789	1.0957	0.8884	0.8992	0.9520
> 65	1.3246	0.9965	0.9680	0.9327	0.8973

Table 5.3

Age and Suicide - Females: Log-odds for Various Age Groups 1966-86

Age	1966	1971	1976	1981	1986
15-24	0.7647	0.8627	0.9466	1.0721	1.3160
25-29	1.1576	1.1883	0.7602	0.9781	1.0144
30-34	1.527	1.3128	1.1481	0.8346	0.7787
35-39	1.3145	1.0456	0.7673	1.0344	0.9668
40-44	1.0487	1.0805	1.0647	1.0587	0.8236
45-64	0.9857	0.9684	1.2084	0.9683	0.9128
> 65	1.0634	0.9271	0.9754	1.0300	1.0089

Further analysis of the residuals' values also indicated the changing rates within age groups over the period. For males in the early age groups [<29 years of age] an increase in suicide rates has taken place from the 1960s to the 1980s. This is reversed in the remaining age groups, with suicide rates falling from the 1960s to the 1980s. The trends for females are not as clear-cut. In the early age groups [as for males], female suicide rates have increased from the 1960s to the

1980s. After the age of 30 years, the rates appear to be decreasing from the 1960s to the 1980s, albeit not as definitely as the male rates.

Youth Suicide in Australia

The preceding statistical analysis confirms the trend revealed by the data on age-specific rates (Table 5.1) that suicide proneness has significantly increased among young Australians. This change is especially significant among adolescents and requires further analysis.

One in seven deaths of males aged 15 to 19 years is now caused by suicide. In 1966 the corresponding figure was only one in twenty. In the 1980s there was one adolescent suicide approximately every 70 hours. An estimated 7000 years of life are lost every year due to adolescent suicides. This is almost 10 percent of the total years of life lost every year in Australia through suicide. Table 5.4 provides a detailed picture of this change in youth suicide in Australia between 1968 and 1988. In economic terms adolescent suicides alone cost the economy millions of dollars.[7] The loss, pain and grief suffered by the family and the community is even far greater and more profound than the economic loss.

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7 For a discussion and methodology for calculating the cost of youth suicide see Peter Leviton 1990, 'The cost of youth suicide', in *Youth Suicide in Australia*, ed. Gail Mason, Department of Employment and Training, Canberra.

Table 5.4

Youth Suicide in Australia, 1965-1988:
Average Yearly Rates per 100,000 Population at Risk

	MALE			FEMALE		
	10-14 Years	15-19 Years	20-24 Years	10-14 Years	15-19 Years	20-24 Years
1968-1970	1.0	7.3	15.3	0.2	2.4	6.3
1971-1973	0.8	9.7	19.7	0.2	4.8	7.3
1974-1976	0.9	10.0	19.7	0.3	3.2	5.0
1977-1979	0.7	11.3	23.3	0.1	3.5	6.3
1980-1982	0.6	10.4	26.3	0.2	2.2	6.0
1983-1985	1.0	12.1	28.3	0.3	2.6	5.7
1986-1988	1.5	17.0	32.0	0.3	4.7	6.3

The increase in youth suicide is not confined to Australia but appears to be a world wide phenomenon. In the United States teenage suicide rates have registered a 287% increase between 1960 and 1980.[8] Table 5.5 gives an overview of changes in youth suicide in different countries since 1970. Studies of youth suicide have identified several factors associated with them: severe depression, feelings of hopelessness, social isolation, and viewing death as the only escape from intolerable life situations. The suicidal youth have been found to display anger at others, and their suicidal actions seem more impulsive.[9] Their suicides appear to be motivated more by interpersonal problems.[10] A recent study by Lester has also revealed that the quality of life was not significantly correlated to the increase in youth suicide.[11] An analysis of

8. Maris, R. 1985, 'The adolescent suicide problem', *Suicide and Life-Threatening Behavior*, 15, pp. 91-109.
9. Maris, op. cit.; Brent, D.A. et al. 1988, 'Risk factors for adolescent suicide', *Archives of General Psychiatry*, 45, pp. 581-588; Hendin, H. 1987, 'Youth suicide: a psychosocial perspective', *Suicide and Life-Threatening Behavior*, 17, 2, pp. 151-165; 'Suicide in young persons' (editorial), *The Medical Journal of Australia*, 147, August 17, 1987.
10. Shneidman, E.S. and Farberow, N.L.1957, *Clues to Suicide*, McGraw Hill, New York.
11. Lester, D. 1988, 'Youth suicide: a cross cultural perspective', *Adolescence*, 23.

correlates of youth suicide revealed that different factors account for the youth suicide internationally. As the data in Table 5.5 shows Australia was one of the countries registering a significant increase in youth suicide.

Table 5.5

Suicide Rates (per 100 000 per Year) in 1970 and Changes by 1980 for the Total Population and for Those Aged 15-24

	Total		Youth	
	1970	% change by 1980	1970	% change by 1980
Australia	12.4	-11.2%	8.6	+30.2%
Austria	24.2	+6.2%	16.5	+9.1%
Bulgaria	11.9	+14.3%	6.9	+34.8%
Canada	11.3	+23.9%	10.2	+50.0%
Chile	6.0	-18.3%	10.1	-31.7%
Denmark	21.5	+47.0%	8.5	+42.4%
Finland	21.3	+20.7%	14.7	+60.5%
France	15.4	+26.0%	7.0	+52.9%
Germany (West)	21.3	-1.9%	13.4	-6.7%
Greece	3.2	+3.1%	1.5	+20.0%
Guatemala	3.2	-62.5%	5.5	-50.9%
Hong Kong	13.6	-0.7%	7.7	+1.3%
Hungary	34.8	+29.0%	18.9	+5.8%
Israel	5.8	+3.4%	3.7	+64.9%
Italy	5.8	+25.9%	2.9	+34.5%
Japan	15.2	+15.8%	13.0	-3.8%
Netherlands	8.1	+24.7%	4.0	+50.0%
New Zealand	9.6	+12.5%	8.0	+73.7%
Norway	8.4	+47.6%	3.7	+224.3%
Portugal	7.5	-1.3%	4.5	+2.2%
Singapore	8.9	+25.8%	7.8	+32.1%
Spain	4.2	+4.8%	1.4	+92.9%
Sweden	22.3	-13.0%	13.3	-13.5%
Switzerland	18.6	+38.2%	13.0	+80.0%
Thailand	4.2	+76.2%	7.2	+77.8%
UK: England & Wales	8.0	+10.0%	6.0	+6.7%
UK: Scotland	7.6	+31.6%	5.8	+65.5%
USA	11.5	+2.6%	8.8	+39.8%
Venezuela	6.8	-23.5%	14.5	-28.3%

Source: Lester, D., 'Youth suicide: a cross cultural perspective', Adolescent, 23,92, 1988.

Why are young people in Australia, who have everything to live for, resorting increasingly to suicide? There are several reasons. Some of the

increase in the youth suicide rate is due to the sophistication of data collection. Suicides are determined by coronial inquests. Evidence suggests that in recent years Australian coroners have categorised more unexpected deaths as suicide than before. In 1972, for example, 19.2 percent of all unexpected deaths in Australia were classified as suicides. In 1981 the proportion had increased to 22 percent. There has also been a tendency on the part of the coroners to categorise fewer female unexpected deaths as suicide.

This change in coronial classification was not uniformly applicable to all Australian states and territories. The New South Wales coroners (as mentioned in Chapter 2) in fact went against the national trend and classified fewer unexpected deaths in 1981 as suicide than in 1972. The Australian Capital Territory registered the most dramatic change and compared with 12.7 percent of unexpected deaths in 1972, 24.4 percent of such deaths were classified as suicide in 1981. The Northern Territory coroners were least likely to classify an unexpected death as suicide.

These patterns if applied to adolescent suicides would suggest that at least some increase in the suicide rate is a statistical artefact. Due to increasing social structural changes young persons these days participate more visibly in the public domain and consequently it is more difficult for the family to conceal their suicide than it was 20 or 30 years ago.

Whatever way we may view the problem the fact still remains that youth suicides were either historically higher but were hidden away as a result of coronial classification practices or that they have been increasing gradually over the past three decades. This then leads again to the question previously raised, why young Australians are killing themselves in increasing numbers? There are several sociological reasons which bear on the question and appear to have significantly influenced the increase in adolescent suicide. These are, the high youth unemployment rate; changes in the Australian family; increasing drug use

and abuse; increasing youth violence; mental health and an increasing disjunction between 'theoretical freedom' and experiential autonomy.

Unemployment Factor

The period of increasing youth suicide strongly corresponds to the high youth unemployment rate. Between 1970 and 1987, the unemployment rate increased about six fold from 2.9 percent to 18.1 percent for 15 to 19 year old males and from 3.6 to 19.5 percent for 15 to 19 year old females. The overall suicide rate for 15 to 19 year olds in the same period increased by about 50 percent. Among 20 to 24 year olds the unemployment rate increased by four fold (from 2.3 in 1967 to 11.7 in 1987) and the suicide rate increased by 86 percent among men and remained unchanged among women (see Table 5.6).

Table 5.6

Unemployment Rate and Mean Duration of Unemployment Among Youths 15-19 Years: 1970-1986

Year	Unemployment		Mean Duration of Unemployment (Weeks)	
	Male	Female	Male	Female
1970	2.9	3.6	3.9	6.4
1972	5.6	5.9	6.5	1.5
1974	5.0	6.7	7.3	8.1
1976	12.7	15.8	19.5	17.6
1978	16.4	17.2	19.8	27.1
1980	14.7	18.8	24.9	28.1
1982	16.3	17.0	21.3	26.6
1984	22.1	19.7	28.6	29.2
1986	18.7	19.5	30.6	29.0

Source: Department of Social Security 1987, op. cit.

The increase was primarily concentrated among the young men. The suicide rate for young women (15-24 years) in fact registered a slight decline in the same period. A significant feature of youth unemployment was that whereas the average unemployment period in 1970 for young males was 3.9 weeks, in 1986 it had increased to 30.6 weeks. The corresponding period for young women in the same period increased from 6.4 to 29.0 weeks. Unemployment in general and prolonged unemployment in particular is associated with low self esteem and with emotional, economic and psychological insecurity. Because of the instrumental roles which are emphasized in male socialization processes, low self-esteem and continuous insecurity exposes them to a high degree of stress which requires skilled management. Those who cannot cope with it become more susceptible to self destructive behaviour. A number of studies in Australia and overseas have confirmed the association between suicide and unemployment.[12]

Unemployment appears to have different effects on men and women. Notwithstanding the high unemployment rates and increasing length in the period of unemployment between 1970 and 1986, the suicide rate of adolescent women did not increase to the degree as that of adolescent men. One possible explanation is the different socialization patterns of women and men. Women are socialized into domestic roles which enable them to find meaningful activities in the domestic domain which reduces the sense of loss, loss of status, loss of self-esteem and loss of social contacts which is also experienced by unemployed men who are predominantly socialized into instrumental social roles. Other possible reasons may be that since frequently men use violence of guns and women use self-poisoning to suicide the chances of women surviving serious suicide attempts are now greater than men because of advances in intensive care medical technology and also that it may still be possible for the family to 'conceal' female suicide more frequently than male suicide.

12. Martina, op.cit.; Hassan and Tan 1989, op.cit.; Platt 1984, op. cit.

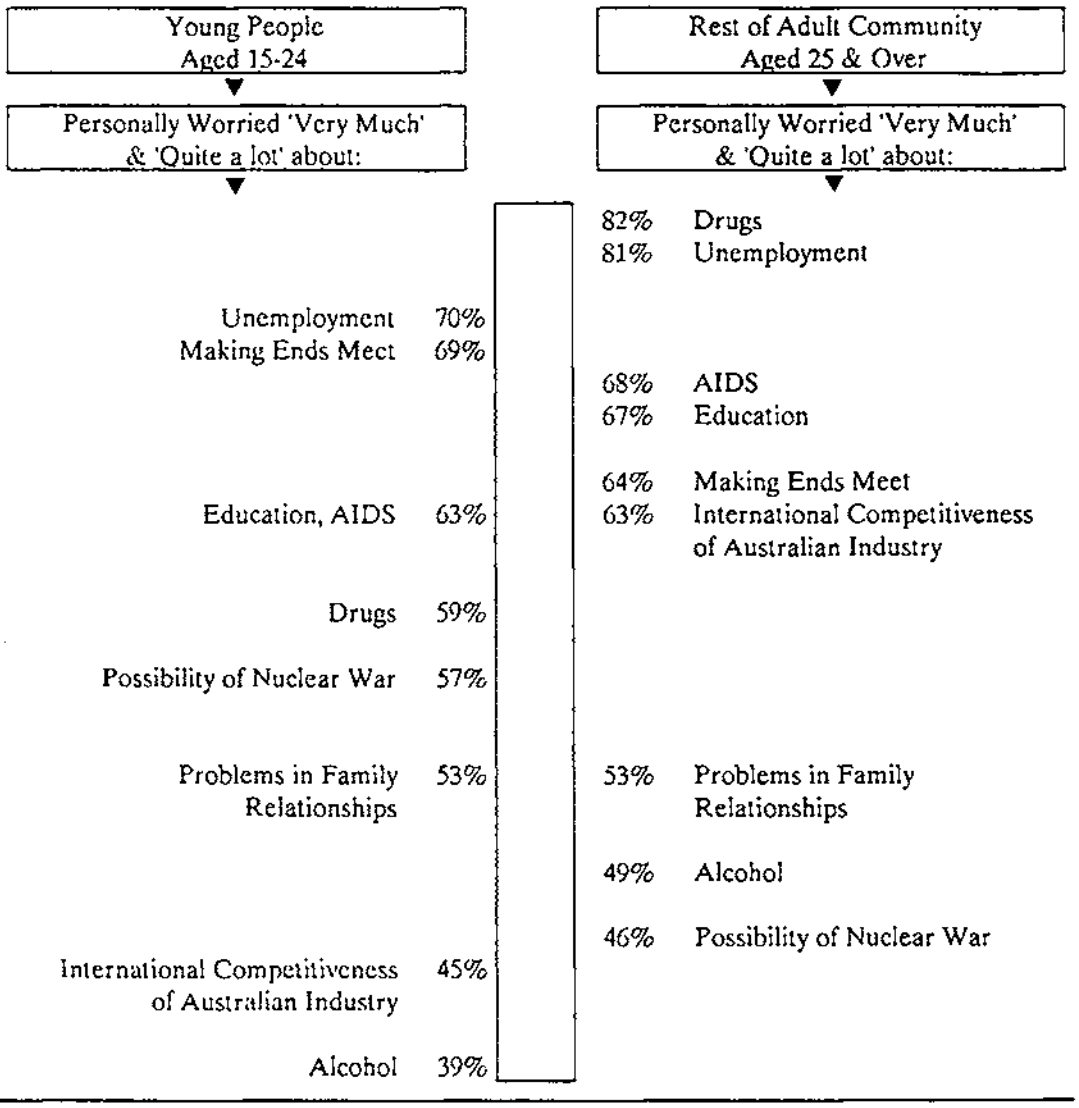
An interesting difference in the way young men and women cope with the insecurity of unemployment can be gauged from their marriage pattern. In 1978 only 0.4 percent of all unemployed 14 to 19 year old males were married. In 1986 the proportion had increased to 1.9 percent. The percentage of 15 to 19 year old married women who were unemployed in the same period declined from 5.8 to 4.4 percent.[13] It would, therefore, appear that social insecurity compels men to seek security through early marriage which further compounds the problem by creating a greater degree of status conflict which according to Emile Durkheim[14] and other researchers[15] increases propensity to suicidal behaviour.

The increase in youth unemployment and the accompanying fear of economic deprivation appear to have had a significant impact on their consciousness. According to a 1988 national youth survey of young people aged 15 to 24, unemployment, poverty, education, AIDS, and drugs worried them most. In general, the result of the survey as reported in Figure 5.2 revealed a sense of pessimism about the future mostly created by their concerns about unemployment, substance abuse, possibility of a nuclear war and family problems. Although they shared these worries with the older Australians, the impact is likely to be much more consequential for the young, given their relative lack of economic and social independence.

13. Department of Social Security 1987, op.cit.
14. Durkheim, *Suicide*, *op.cit.*
15. Stack, S. 1980, 'The effects of marital dissolution on suicide', *Journal of Marriage and the Family*, 42, pp. 83-92.

FIGURE 5.2

Community Issues and Concerns by Age, Australia 1988



This barometer shows the percentages of those under & over 25 indicating that they are 'very much' or 'quite a lot' worried about each issue in a structured question.

Source: Department of Employment, Education and Training, *A Survey of Community Attitudes to Commonwealth Employment, Education and Training Policies and Programs*, Canberra, 1988.

Similar conclusions have been reported by several other recent studies suggesting that a large proportion of young people regard their future and that of the world with fear and trepidation. They see a world devastated by nuclear war and ravaged by pollution and environmental degradation, a dehumanized society in which technology is out of control and unemployment rampant. This pessimism about the future unfortunately is easily translated into a more

personal despair, powerlessness and a sense of hopelessness which can contribute to mental illness, powerlessness, personal despair and a sense of hopelessness and other forms of problem behaviour among young people.[16]

The Family Organization

There is now considerable reliable clinical evidence which points to a close link between suicidal behaviour and parent-child relationships. According to Hendin a leading American psychiatrist who has done some of the pioneering research in this area, the background of suicidal youngsters repeatedly involves parental figures who were frustrating, rejecting and unkind.[17] The parents seem to want the child's presence, but without emotional involvement. They want him or her to fulfil parental expectations, though as parents they have given the child little support and incentive to do so. The young person may accept parental expectations in a mechanical manner without deriving much pleasure or satisfaction from fulfilling them. At the same time, they do not feel free to act in ways that would separate them from their parents. Adolescents in such circumstances may make few emotional demands but become instead withdrawn, depressed, quietly preoccupied with death and suicide.[18]

If these clinical based findings are valid and I believe they are, then the changes in the Australian family and its organization and structure may have significantly influenced the young suicide rates in Australia. The size of the Australian family has declined by 15 percent between 1976 and 1981 from 3.53 to 3.1 persons. The nuclear family type consisting of husband, wife, and dependent children account for little over one quarter of the Australian families (26.6 percent in 1981). The fastest growing family type over the past 20 years has been

16. Eckersley, R. 1988, *Casualties of Change: The Predicament of Youth in Australia*, Commission for the Future, Canberra.
17. Hendin, H. 1987, 'Youth suicide: a psychosocial perspective', *Suicide and Life Threatening Behaviour*, 17, 2, pp. 151-165.
18. Hendin, H. 1975, 'Growing up dead: student suicide', *American Journal of Psychotherapy*, 29, pp. 327-38; Dorpat, T.L., Jackson, J. and Ripley, H. 1965, 'Broken homes and attempted and completed suicides', *Archives of General Psychiatry* 12, pp. 213-216.

the single parent family. In 1981 there were a quarter of a million single parent families and their numbers are expected to grow in the future.[19]

A substantial proportion of Australian children now spend part of their childhood living with one of their parents. In 1981, 13 percent of children less than 15 years of age and 11 percent of children aged 15 to 19 years lived in single parent households.[20] As these figures only relate to one point in time the actual number of children who have spent or will spend part of their childhood in a single-parent family situation is likely to be significantly higher.

There has been a simultaneous increase in couples living in de facto relationships, and in the divorce rate. In 1961, there were 2.8 divorces per 1,000 married women, in 1981 the rate was 12.7. These trends clearly suggest that the Australian family is undergoing a significant change in its organization, composition and structure. These changes highlight the new emerging patterns of social organization. How these changes affect the patterns of social behaviour is not yet totally clear. But as an indication of the implication of these changes for suicidal behaviour, I would like to refer to a study which shows that in the United States a one percent increase in divorce is associated with an 0.54 percent increase in the suicide rate.[21]

A point which is often missed in studies focussing on the relationship between the family and social behaviour is the socio-economic attributes of the parents. In Australia, a dramatic change has occurred not only in the social demography of the family but also in the qualitative attributes of the population involved in, or likely to be involved in, parenting. Let me illustrate this point by focussing on the position of women. Women and men are now marrying later than before and there is now a longer gap between the time of marriage and the birth of the first child. In 1967, the median age of women at first marriage was 21.1 years and age at first birth was 23.7 years. In 1983 the corresponding figures

19. Hugo, G. 1986, *Australia's Changing Population*, Oxford University Press, Melbourne.
20. ibid.
21. Stack, 1980, op.cit.

were 22.7 years and 26.1 years. This is primarily due to the increasing educational attainment of men and women.

The data in Table 5.7 show young adolescents today are living with parents who are more educated than ever before. They are also living in families and households in which both parents are likely to be working more frequently than before. These qualitative changes in social, educational and economic status together with the fact that families now have fewer children than before, have created circumstances of more intensive, economic and social investments in children. Parents under these circumstances generally expect more from their children in terms of academic achievements and success.

A recent Australian study of educational attainment of young persons in their first few years of university has found that students whose father had a degree and whose mother is in a professional or semi-professional occupation, were more likely to succeed in university.[22] Those who may find it difficult to reach the academic expectations of their parents may experience a sense of failure and depression which under certain circumstances may have serious implications for their social-psychological well-being. Those who are unable to make the grade are also those who need more parental and social support. The clinical studies of suicidal young persons have found that they usually have a profound need to seek someone who can change their past frustrations of life. American psychiatrist Hendin has suggested that if at the heart of young suicide one invariably learns of profound difficulties in the parent-child relationship and if we are seeing unhappy families, absent parents and unwanted children increasing in numbers, a case can be made for the pessimistic prediction that the suicide rate among youth will continue to rise.[23]

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22. Power, C., Robertson, F., and Beswick, G. 1987, *Student Withdrawal and Attrition for Higher Education*, National Institute of Labour Studies, Flinders University, Adelaide.
23. Hendin 1987, op.cit.

Table 5.7

Educational Attainment of Men and Women Born in 1915-24 and 1945-49 Australia

	1915-24	1945-49	1915-24	1945-49
Degree	5.3	8.9	-	4.4
Certificate/Diploma	10.7	15.7	14.7	26.3
Trade Level	24.5	26.4	3.1	3.4
Other	3.0	4.6	1.9	3.4
Total with Post-School Qualification	43.5	56.7	20.5	37.5
Without Post-School Qualification and Left School at:				
17 and over	4.0	9.9	4.6	7.7
16	6.2	9.3	8.9	13.3
15-14	33.3	21.3	52.5	36.2
13 or under	13.1	2.9	13.5	5.2
Total Without Post-School Qualification	56.5	43.4	79.5	62.5
Total	100.0	100.0	100.0	100.0

Source: ABS, *Social Indicators, 1980,* op. cit., Adapted from Table 4.35

Suicide and other Forms of Violence

The marked increase in suicide among the young has been accompanied by a rise in the other serious problems such as homicide, drug abuse, alcohol abuse, delinquency and crime - all of which are a barometer of social stress. Suicide methods over time have also become more violent. In 1966, 32 percent of males and 6 percent of females used guns and other violent methods to suicide. These figures had increased to 38 percent and 13 percent respectively in 1981. In a recent study of adolescent suicides in the United States it was found that there was a strong correlation between suicidal behaviour and the presence of guns in the home. The research findings have suggested that because guns were more often present in the homes of suicide completers the rate of suicide by firearms may be proportional to the availability of this particular irreversible method of self-inflicted injury. The three fold increase in the U.S. adolescent suicide rate since the mid 1950s has been attributed to an increase in suicide by

firearms. According to several studies the rate of suicide by gun has grown in parallel with increases in the domestic production, sales and privte ownership of guns.[24]

Table 5.8

Arrest Rates for Serious Assault and Homicide for Persons 10-16 Years of Age - Australia (Rate per 100,000 Population)

	Type of Crime			
	Serious Assault		Homicide	
	Male	Female	Male	Female
1964	21.3	0.8	1.2	0.14
1980	40.4	6.5	2.4	0.34
1985	61.5	8.9	N.A.	N.A.

They are also exposed to more violence through the print and electronic media. According to a recent American study, under certain conditions celebrity suicide stories influence violent, suicidal behaviour and increase imitative suicides.[25] For example, the suicide of Freddie Prinze who, at age 22, had risen from a humble Puerto Rican family to become the star of the popular television series 'Chico and the Man', was significantly associated with a rise in youth suicide in the United States. Studies have also revealed that although fictional

24. Brent, D.A., Perper, J.A., Goldstein, E., Kalko, D.J., Allan, M.J., Allman, G.J. and Zelenak, J.P. 1988, 'Risk factors for adolescent suicide: a comparison of adolescent suicide victims with suicidal patients', *Archives of General Psychiatry*, 45, pp. 581-88. Also see Cantor and Lewin 1990, op. cit.; Brent, D., Perper, J.A., Allman, C.J., Moritz, G.M., Wartella, M.E. & Zelenak, J.P. 1991, 'The presence and accessibility of firearms in the homes of adolescent suicides: a case control study', *Journal of the American Medical Association*, 266, 2989-2995.

25. Stack, S. 1987, 'Celebrities and suicide: a taxonomy and analysis, 1948-1983', *American Sociological Review*, 53, p.3.

violence has no imitative effect on actual violence, the accounts of real violence are associated with real world aggression.[26]

Substance abuse is also a significant factor in youth suicide. In the United States the increase in youth suicides in the 1970s and 1980s closely paralleled the increase in use and substance abuse among young persons and is now regarded by the American researchers as the single most common denominator of those at high risk. According to a major recent study of adolescent suicides, one third of the suicide victims in the study were legally intoxicated at the time of their deaths. The high blood alcohol levels and suicide by firearms among adolescents are also highly correlated and in these cases suicide seems to occur hours rather than minutes after alcohol ingestion. Do suicide victims drink to lower their inhibitions and facilitate a planned suicide? Does the fatal impulse emerge spontaneously during a drinking bout? The role of alcohol intake and intoxication is now regarded as an important area of further research.[27]

Suicide and Mental Health

Mental health is a major factor in suicidal behaviour. It is particularly important in youth suicide. According to the South Australian Coroner's Court records in 1988/89, of the 92 persons aged 24 years and less who committed suicide in South Australia, 86 had a history of depression, acute anxiety and/or serious disturbance in interpersonal life at the time of suicide. Given this extremely high incidence of depression among the young suicides, it is pertinent to ask whether or not they had access to psychiatric help. The case records in the Coroner's Court indicate that very few were receiving any psychiatric treatment at the time of suicide.

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26. Kessler, R. and Stipp, H. 1989, 'The impact of fictional television suicide stories on U.S. fatalities: a reflection', *American Journal of Sociology* 90, pp. 151-67; Messner, S. 1986, 'Television violence and violent crime: an aggregate analysis', *Social Problems*, 33, pp. 218-35; Phillips, D. 1974, 'The influence of suggestion on suicide', *American Sociological Review*, 39, pp. 340-54; Phillips, D. and Bollen, K. 1985, 'Same time last year: selective data dredging for negative findings', *American Sociological Review*, 50, pp. 364-71.
27. Brent et al. 1988, op. cit.

A general examination of the access of young people to psychiatric services in the public hospitals in South Australia, however, reveals that they had the lowest utilization rate of psychiatric services in the public hospitals in South Australia in 1986. This is shown in Figures 5.3 and 5.4. Interestingly, when one compares the age-specific admission rates for psychiatric wards and the admission rate for attempted suicides one finds that there is a statistically significant inverse correlation between the two rates. In 1986, at least in South Australia, the age group with the highest utilization rate of public psychiatric services also tended to have lower admission rates for the attempted suicides. Although no causal inference can be drawn from this, correlational analysis it is plausible to suggest perhaps greater access to psychiatric treatment may have a salutary effect on the suicidal behaviour. We need more empirical research to assess the significance of this finding. If access to psychiatric treatment reduces the incidence of suicidal behaviour then this can partly explain the dramatic decline in the suicide rate of people between 40 and 60 years of age who also have the highest utilization rate of psychiatric services. A recent study of adolescent suicide strongly supports the need for psychiatric help. The study revealed that 22 percent of adolescent suicide victims were suffering from a serious bipolar disorder (i.e. major depression and mania or hypomania) or a major affective disorder with a concomitant non-affective disorder (e.g. anxiety disorder, conduct disorder). They were also less likely than a control group of adolescent inpatients of a psychiatric unit to have had any contact with a mental health professional in their lifetimes.[28]

However, irrespective of the casual link between the two, data reported in Figures 5.3 & 5.4 clearly reveal the need for improving the access to psychiatric services among the young people. This can be partly achieved by making them more aware of the available services and through encouragement by parents,

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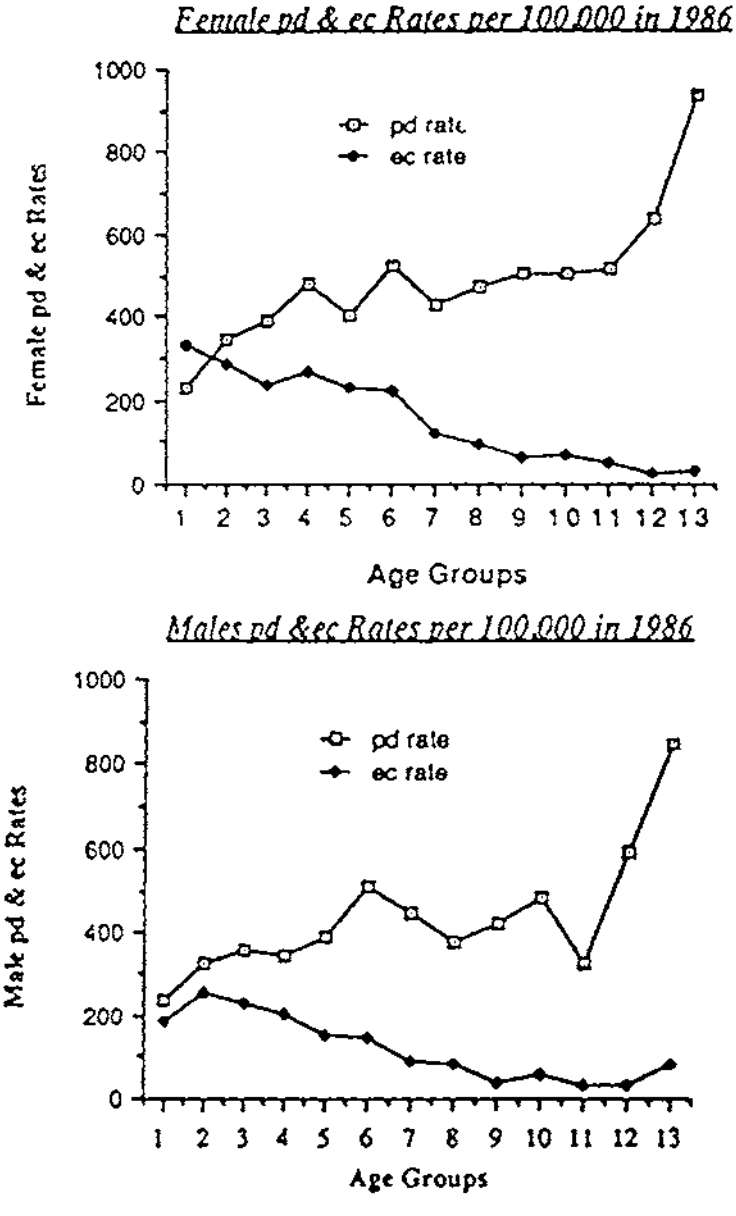
28. Brent, et al. op. cit.

teachers, employers and friends to use the psychiatric services to repair their mental health.

Figures 5.3 & 5.4
Access to Psychiatric Services in Public Hospitals in South Australia 1986



pd = principal diagnosis and refers to ICD code 290-299 (psychosis/mental disorder)
ec = external cause refers to attempted suicide and ICD codes 950 to 959.
Source: South Australian Health Commission, Hospital Separation Tables 1986.

The Citizenship Rights for the Young and Experiential Autonomy

The last major factor I would like to mention pertains to the disjunction between citizenship rights and experiential autonomy. By citizenship rights I mean the gradual extension of civil, economic, welfare and legal rights which are being gradually extended to adolescents by the State. The extension of these rights does not automatically lead to the actual experience of them. The young have the formal rights but the autonomy to exercise them is mediated by parental and societal approval and in some instances, such approval may not be granted either by parents and/or society. The absence of experiential autonomy on the one hand and the presence and promotion of civil rights on the other, may create a social disjunction which both creates as well as heightens the intergenerational conflict, one extreme consequence of which is suicide. Furthermore, changes in the Australian family such as a high divorce rate and increasing numbers of sole parenthood have also contributed to this conflict.

Conversely, it is plausible that the extension of legal, welfare and other rights to adolescents may have resulted in their exercising such rights which in turn have affected their suicide rates adversely. In other words, it may be that adolescents are exercising their rights but are having difficulties in coping with the repercussions of doing so. (For example, one consequence of receiving unemployment benefits may be increasing number of adolescents living away from home in chronic poverty and isolation which then produces a new set of social and psychological pressures.) Taken together then, these factors may constitute one possible explanation why suicide among the young and especially the adolescents, has increased in recent years in Australia. One further observation on the factors affecting youth suicide: Richard Easterlin, an American economic demographer, has suggested that young persons born in a baby boom are adversely affected in their ability to fulfil their aspirations because as young adults they face different odds in competing with each other for scarce resources. Psychological stress among these young adults, he

suggested, will be comparatively high as will the divorce rate, suicide, crime and feelings of alienation. Diminished outlook for success may manifest itself less in economic insecurity than in a sense of the meaninglessness of life, with few social constraints against suicide. Easterlin foresaw continued cyclical rises and falls in the rate of young suicides, since greater stress on a particular age cohort results both in their having few children, and children who have somewhat lower expectations and aspirations.[29]

Suicide among the aged

The statistical trends in the relationship between suicide and age discussed above are similar to those revealed by studies in the United States, Canada, Europe and Japan. Recent research reveals a decline in the intensity of the relationship between old age and suicide, as well as increasing rates of suicide amongst the young. Some of these studies indicate a decline in suicide amongst the elderly, especially among men aged 64-74 years.[30] In the United States, this decrease has been mostly attributed to the increase in social security benefits. It may be that one contributing factor to the decline in suicide amongst the elderly in Australia is their relatively improved economic position in society and also the benefits which accrue from the welfare transfers to the aged.

Suicide among the elderly, like suicide among the young, is influenced by a multitude of complex factors including isolation, bereavement, serious physical illness, depression, organic brain disease and poverty. All these factors seriously affect their social status and social functioning and consequently may adversely affect their level of social integration in society. In the American context a useful model of suicidal behaviour has been proposed by Shulman. This model is provided in Figure 5.5 below. According to Shulman, depression is a major

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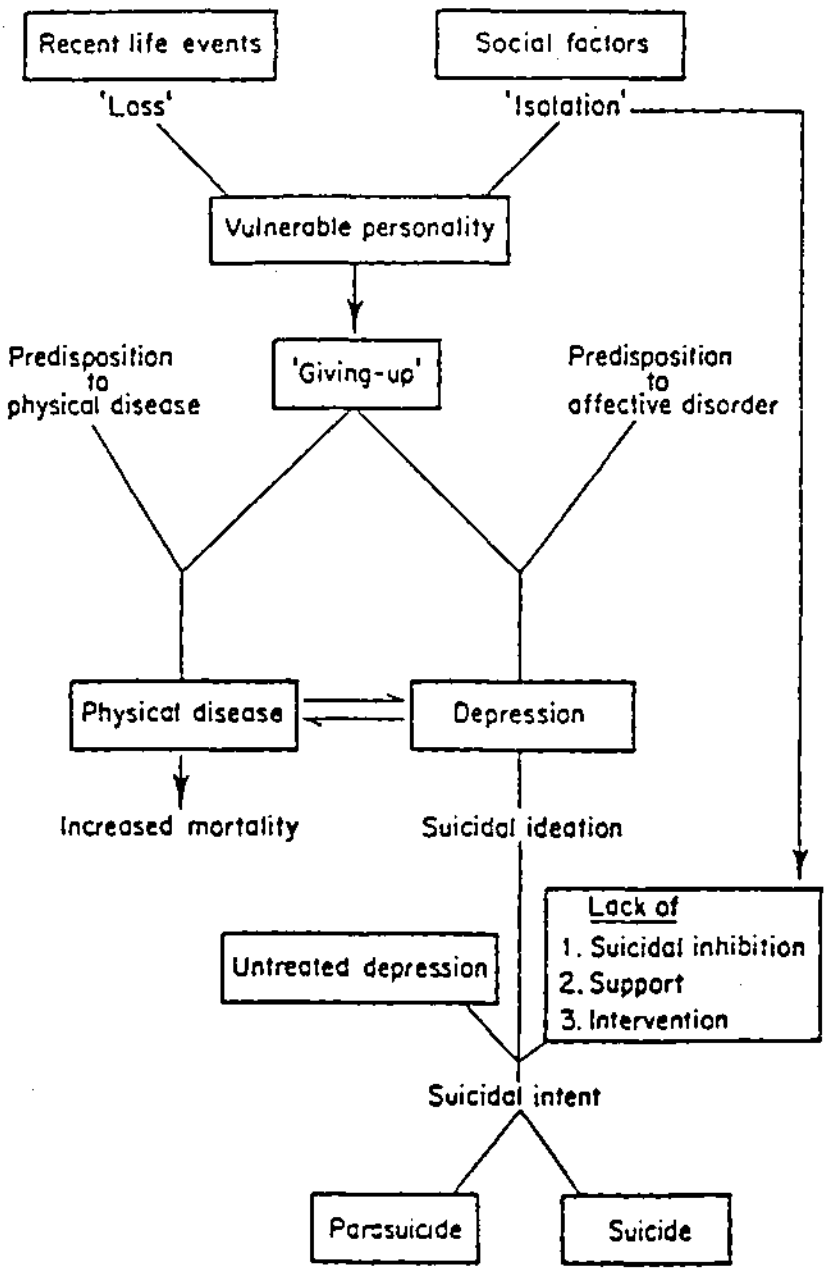
29. Easterlin, R. 1980, *Birth and Fortune: The Impact of Numbers on Personal Welfare*, Basic Books, New York.
30. Wardle, Lynn, D. 1988, 'Suicide among the elderly: a family perspective' (mimeo), Brigham Young University, School of Law.

determinant of suicide among the elderly and provides the final common pathway for all of the various antecedent factors that predispose them to suicide.[31]

Figure 5.5
Suicide and Parasuicide among the Aged - An Explanatory Model



Source: Shulman, Suicide and Parasuicide in Old Age: A Review, 7 AGE AND AGEING 201. 06 (1978)

31. Shulman, K. 1978, 'Suicide and parasuicide in old age: a review', *Age and Ageing*, 201.

From a different perspective, one could argue that with increasing numbers of people living longer, the problems which beset the elderly, such as chronic illness, institutional care and loneliness and which may have contributed towards high rates of suicide in the past, have shifted into even older age categories. If this is so, it would be desirable to investigate this issue further by examining the suicide trends in various groups of old persons, ranging from old to very old.

The data in Table 6.8 indeed show that among men, suicide rates increase significantly among the very old. Between 1980 and 1985 the suicide rate for males 85 years and older had increased from 37.0 to 51.1 per 100 000 population. The rate among the aged women also had increased but unlike men their rate tends to peak between 75 and 79 years and then declines among those aged 85 years and older.[32]

The significance of higher suicide rates among the very old is that most of them had willed themselves to live in order to reach their age. But the economic, social, psychological and health problems of old age become unbearable. Preliminary evidence from South Australia suggests that among older persons, especially older men, suicide is often a planned and rational act. Suicide for many of them means not an unwillingness to live or inability to live but a willingness to die. The following two suicide notes exemplify this point. Both notes were written by men and were addressed to their wives:

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32. In a commentary on this data which appeared as part of a paper by Hassan and Carr, 'Changing Patterns of Suicide in Australia', op. cit., Cantor and Dunne have pointed out that suicide rates for the aged are highly variable because of their actual numbers which tend to be not too large. However, even their evidence about the mean suicide rates for persons aged 65-69, 70-74, 75-79, 80-84 and 85 and above between 1980-87 confirm that the rates increase significantly with age. See Cantor, Christopher H. and Dunne, Michael P. 1989, 'Changing patterns of suicide', letter in *Australian and New Zealand Journal of Psychiatry*, 439-440.

Table 5.9

Suicides per 100,000 Population Among the Aged in Australia 1980-1990

Age	1980	1985	1990
Male			
65-69	22.8	21.5	25.1
70-74	21.2	28.8	27.7
75-79	30.3	21.7	25.0
80-84	32.1	27.0	35.4
85+	37.0	51.1	50.0
Female			
65-69	7.4	7.1	7.7
70-74	6.5	8.1	8.1
75-79	7.9	11.4	7.6
80-84	12.9	8.8	9.9
85+	6.0	6.2	7.4

Source: ABS, Canberra, unpublished data.

The first note was written by a 66 year old man suffering from terminal kidney and bowel cancer. He committed suicide by carbon monoxide poisoning:

> Dear ... I will always love you. I have gone to your pussy cat and we will both wait for you. I am getting worse and I would like you to remember me as I am. Soon I would be just a 'vegetable' and in pain. Ring D and ask him to ring the police. They should find me up in ... Gully. I hope I don't make a mess. I have taken a pill to try to prevent it. I don't want to mess up your car. I love you

The second note was written by an 80 year old man who also committed suicide by carbon monoxide poisoning. He was also suffering from terminal cancer:

> Dear ..., I feel so ill, I am going to end my life. I can't put up with it any longer. You have been a good mate and I love you. Thanks for looking after me like you did. You have been wonderful and I love you for it. No one else could have done better than you. I hope you can find it in your heart to forgive me. Tell M and the kids I loved them too ... your loving husband ... Goodbye.

It is not only improved physical health that could contribute towards a reduced rate of suicide amongst the very old, but also improved socio-economic conditions and mental health. We need data for a longer period to assess the validity of the trend noted above for suicide among the aged. Until such data become available the findings reported here should be regarded as tentative, needing further empirical substantiation.

Concluding Remarks

The evidence presented in this chapter suggests that until 1964, suicide was primarily a problem among the older age groups. By 1984 it had changed and suicide had become a problem common to all ages. Two age groups, the young persons (15-34 years old) and the very old (80 years and over) have registered considerable increases in suicide rates in recent years. Another change since 1971 has been a gradual increase in the suicide rates of men (15-34 years old) and a decline in the suicide rate for women.

A number of factors including unemployment, changing family structure, increasing substance abuse, access to psychiatric services, welfare transfers, improvements in intensive care medical technology and ideological factors appear to have contributed towards the production of these trends.

The high suicide rate among the young and the elderly may also be due to the high dependency of these age groups in society. Dependency itself is consequence neutral but if stigmatized it produces social disruption and disorganization. The dependency experienced by the young and the aged in modern societies like Australia is stigmatized due to their reduced ability to engage in reciprocal social exchange as a result of factors such as prolonged unemployment, extensive poverty, life long disability and ill-health. According to Turner there is an interesting parallel between the stigmatization of the young and the aged as marginal, dependent groups who are perceived to be either no longer or unable to contribute to common good. Because the adolescent and the

elderly have a number of shared characteristics (such as dependency, the absence of social obligations and absence of paid work), they are often described within the same pejorative, stigmatizing vocabulary.[33]

The experience of stigmatized dependency by the young and elderly reduces their level of social integration in society and increases their sense of social isolation thus producing two very potent social factors as contributing causes of their high suicide rates.

33. Turner, B.S. 1989, 'Ageing, status politics and sociological theory', *British Journal of Sociology*, 40, pp. 588-606.

CHAPTER 6

SPATIAL AND TEMPORAL ASPECTS OF SUICIDE

Studies of spatial distribution of suicide can provide important insights into its epidemiology and etiology. This knowledge can then be applied to ameliorate conditions which are conducive to a high incidence of suicide and other forms of social pathology. Recent studies in Australia and elsewhere have shown that suicide rates tend to be higher in central city areas and especially in the areas which are characterized by high internal and external densities, poverty, high-rise tenement housing and transient or deviant types of groups.[1] Sociological analyses have also revealed that the reasons for the higher suicide rate in these areas are the numbers of single, divorced, unemployed, migrant and aged persons, all of whom tend to have higher suicide rates.

In a detailed study of spatial variations in suicide rates in metropolitan Sydney, Burnley has shown that there was 'a serious concentration of suicide in the inner suburbs of Sydney, for in the four years between 1970-1973, 11 percent of the suicides in Australia took place in a part of the inner suburbs in which only 3.2 percent of the national population resided'.[2] He attributed this high concentration of suicidal behaviour to the presence of groups such as migrants, economically disadvantaged, single, unemployed, divorced, separated and widowed males who tend to have high suicide rates.

In another study of the spatial distribution of adolescent suicides in Melbourne, Meares, Kraiuhin and Benfield[3] found that while the suicide rate for adolescent males doubled during the 1970s, the rate for adolescent girls remained

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1 Burnley, I.H. & McGlashan 1980, 'Variation of suicide within Australia', *Social Sciences and Medicine*, 140, pp. 215-224; Burnley, I.H. 1978, 'The ecology of suicide in an Australian metropolis: the case of Sydney', *Australian Journal of Social Issues*, 13, pp. 91-103, Hassan, R. 1983, *A Way of Dying: Suicide in Singapore*, Oxford University Press, Kuala Lumpur; Meares, R., Kraiuhin, C. and Benfield, J. 1983, *Adolescent Suicide, Australian Family Physician*, 12, p. 8.

2 Burnley 1978, op. cit., pp. 93-94.

3 Meares, Kraiuhin & Benfield, op. cit.

unchanged. In addition, they also found that higher rates of suicide for females occurred in inner suburban areas, while for boys the highest rates were in affluent areas.

Table 6.1

Male and Female Suicide, Melbourne 1970-80
Age 15-19

	Male	Female
Inner suburbs	11.8 *(14.0)	10.3 (13.0)
Affluent areas	20.8	5.8
Outer eastern suburbs	7.8	3.4
'Sand belt'	6.5	4.6
Western suburbs	7.3	4.2
Semirural	2.6	3.0

*including St Kilda
Source: Meares, Kraiuhin and Benfield, op. cit.

Meares et al. suggested that 'bound' males (i.e. those who are pathologically retained within the family nexus) and 'expelled' females (i.e. those who are no longer wanted and pushed out of the home) may be the groups at risk of suicide. The researchers remained mystified as to why boys at home were more likely to kill themselves, but apparently only in the affluent suburbs. They suggested risk-taking behaviour, and hostility as possible factors influencing the suicide rate. Interestingly, they revealed that the Melbourne suburb of St. Kilda, an area associated with high levels of drug addiction and prostitution, showed little difference in suicide rates from those in affluent areas.

Regional Variations

A study of regional variations in suicide rates by Burnley and McGlashan revealed generally higher rates for men and women in capital cities and surrounding regions between 1970 and 1972.[4] A more detailed analysis of the difference between the capital cities and the non capital city areas from 1971 to 1985 (see Table 6.2) showed that in the capital cities of Sydney, Melbourne, Brisbane and Perth the rates actually registered a decline. In Adelaide and Hobart the rates remained relatively unchanged, while in Canberra, the rate almost doubled from 6 to 11 per 100,000 population.

The rates for the non-capital city areas in New South Wales, Victoria, Queensland, Western Australia and South Australia either remained stable between 1971 and 1985 or registered a decline. On the other hand the incidence of suicide increased in non-capital city areas of Tasmania and the Northern Territory. The data in Table 6.2 shows a mixed pattern in rural-urban changes in the suicide rates in various parts of Australia. This pattern needs a closer scrutiny in order to explain its causes. At present the absence of relevant and systematic evidence makes it difficult to draw any definite conclusion. One important reason, however, is likely to be related to the demographic structure and composition of rural and metropolitan areas.

Variations in New South Wales

In a study of urban-rural trends in youth suicide in New South Wales, Dudley, Waters, Kelk and Howard[5] suggested that since 1964 suicide proneness of the young (10-19 years old) in rural New South Wales increased significantly compared with urban New South Wales. Their findings showed that since 1967 youth suicide in New South Wales has registered a significant increase. The

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4 Burnley & McGlashann, op. cit.

5 Dudley, M., Waters, B., Kelk, N. & Howard, J. 1990, 'Youth suicide in New South Wales: urban-rural trends 1964-1988', paper presented at 1990 Conference Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.

overall youth suicide rate has increased from 2.8 to 4.3 per 100,000 population at risk. This relatively small increase in overall suicide rate conceals vastly greater increases in the rural New South Wales.

Table 6.2

Suicide Rates in Capital Cities and Non-Capital City Areas for States and Territories between 1971 and 1985

Year	1	2	3	4	5	6	7	8	9*
				Capital City					
1971	14	15	15	10	16	16	-	6	14
1981	11	10	12	12	11	14	-	9	11
1985	12	10	13	11	12	15	16	11	12
				Rest of the State					
1971	12	12	15	11	12	10	5	-	12
1981	10	12	14	13	10	15	13	-	12
1985	11	11	14	8	12	16	7	-	12
				Total					
1971	13	14	15	10	15	12	5	6	13
1981	10	11	13	12	11	15	13	9	11
1985	9	10	14	10	12	16	11	11	12

Source: Australian Bureau of Statistics, Canberra, special tabulation.

* 1 New South Wales
2 Victoria
3 Queensland
4 South Australia
5 Western Australia
6 Tasmania
7 Northern Territory
8 Australian Capital Territory
9 Australia

Overall 61.5 percent of suicide victims lived in the Sydney Statistical Division, 6.2 percent lived in Newcastle and Wollongong and 3.7 percent came from out of state. The remaining 28.6 percent lived in the rural areas. Since 1966 there has only been a slight, or no change, in metropolitan Sydney, Newcastle and

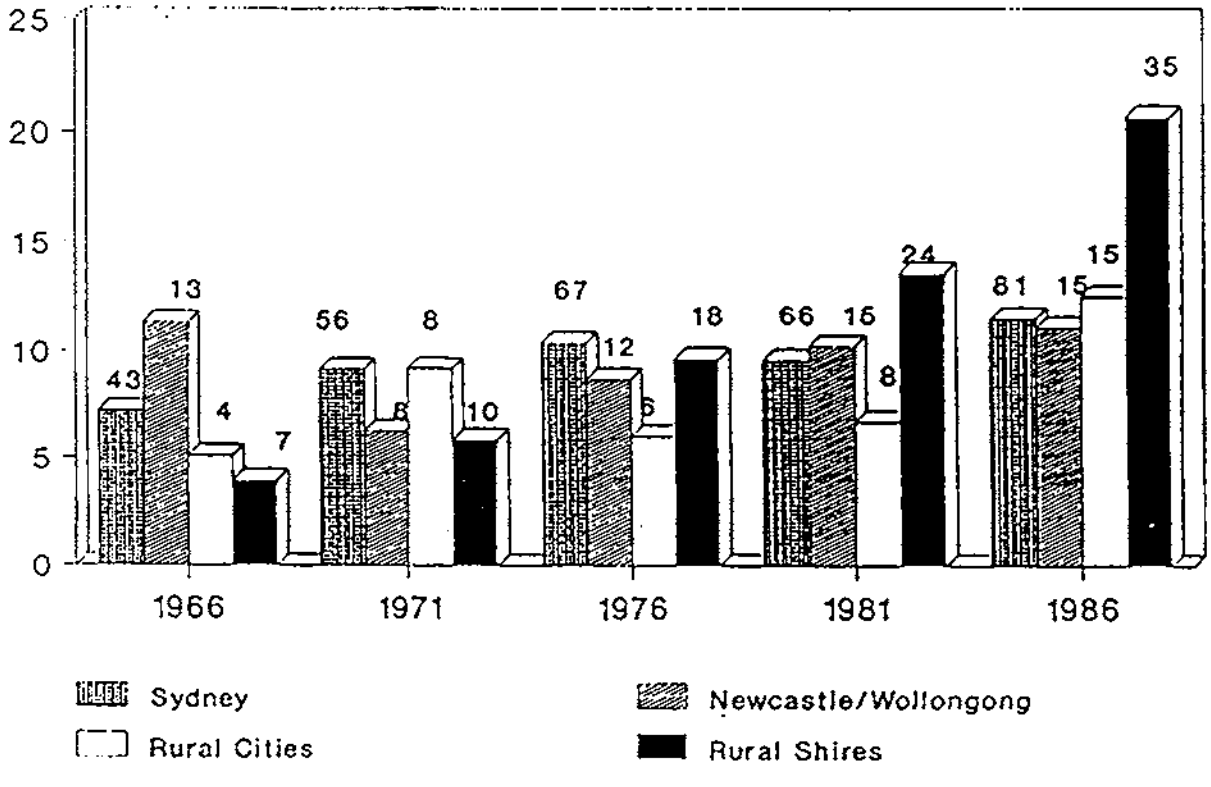
Wollongong. The youth suicide rates in rural New South Wales, however, have increased significantly and consistently.

More significantly the rate per 100,000 population for 15-19 year old males in 'rural cities' has more than doubled from 5.1 in 1966 to 12.5 in 1986, whereas in rural shires and municipalities they increased sixfold from 3.5 in 1966 to 21.6 in 1986. According to Dudley et al, the increase in youth suicide in New South Wales is primarily a rural problem, and they identified several plausible reasons for this increase.

Figure 6.1

Suicide of Males (15-19 Years) by Area of Residence

per 100,000 Population



Firstly, the Australian rural sector has suffered a major economic downturn since 1966 with restriction of overseas markets, consolidation of properties and the collapse of small business. This is reflected in unemployment, lower incomes, poverty, malnutrition and substandard housing. Secondly, 'the bush' suffers 'the tyranny of distance' and a corresponding lack of services and resources including mental health services. Thirdly, the changing perception of 'the bush' in urban and rural areas. 'The bush' is historically powerfully tied to the Australian identity. It is often idealized as a setting where rustic folk work hard and maintain mental and physical health through self sufficiency. However as Australia has moved away from dependence on primary industry, the bush has assumed a less conspicuous role in shaping the national image. There has been a breakdown of close-knit rural communities and challenges to conservative value systems that have previously enabled endurance in the face of national disaster and hardships.[6]

Rural-urban Differences in Victoria

In order to ascertain the patterns of suicide by gender and locality a detailed analysis of suicide in Victoria between 1947 and 1986 was conducted. The findings are reported in Tables 6.3 and 6.4 below and reveal that the male and female suicide rates in Victoria increased significantly between 1947 and 1986. The male rate increased from 12 to 18.6 and the female rate from 4.6 to 7 per 100,000 population.

6 Dudley et al., op. cit., p. 8.

Table 6.3

Suicide in Victoria: Comparison of Metropolitan Melbourne with the Rest of Victoria 1947-1986

	1947	1954	1961	1966	1976	1986
Males	12.0	12.1	13.3	14.8	12.8	18.6
Metropolitan	11.8	12.9	13.8	15.9	12.0	18.8
Rest of the State	12.4	11.0	12.4	12.6	14.8	18.1
Females	4.6	4.2	6.6	8.7	5.4	7.0
Metropolitan	4.8	4.8	8.4	10.1	6.2	8.0
Rest of the State	4.4	3.3	3.0	5.3	3.2	4.3

Table 6.4

Suicide in Victoria: Male to Female Ratio of Suicide Rates 1947-1986

	1947	1954	1961	1966	1976	1986
Metropolitan	2.5	2.5	1.6	1.6	1.9	2.4
Rest of the State	2.8	3.3	4.1	2.4	4.6	4.2
Victoria	2.6	2.9	2.0	1.7	2.4	2.6

The analysis by metropolitan and non-metropolitan area shows that from 1954 to 1966 the rates for men residing in metropolitan Melbourne were higher than those living in the non-metropolitan areas of Victoria. In 1976, however, this trend was reversed, and at that time the rate for men in non-metropolitan areas was higher. In 1986 the pattern had reverted to the previous pattern and showed that the men in Melbourne had slightly higher rates than their counterparts in the rest of Victoria.

The comparison of the female suicide rate shows that women residing in metropolitan Melbourne area had a higher suicide rate than women in the rest of Victoria. Furthermore, whereas the suicide rate of women in non-metropolitan Victoria has shown a slightly downward tendency between 1947 and 1986 (except in 1966 when it registered a marked increase), the rate for women living in Melbourne registered a gradual increase from 4.8 to 8 per 100,000, an increase of 66 percent.

An examination of trends in the male to female suicide ratio between 1947 and 1986 reveals that for metropolitan Melbourne the ratio declined between 1947 and 1966 and then increased until in 1986 it was 2.4:1, almost identical to what it was in 1947. This pattern is consistent with the findings reported earlier in Chapter 4. However, the pattern is very different for the rest of Victoria. In non-metropolitan Victoria the male to female ratio has been gradually increasing from 2.8:1 to 4.2:1. The only aberration from this pattern occurred in 1966 when, as noted earlier, due to a significant increase in the suicide rate of women, it declined to 2.4:1 (see Table 6.4).

Although Victoria has urban population outside metropolitan Melbourne, if one assumes that much of the non-metropolitan population lives in small towns or rural areas then the pattern reveals a significant difference in propensity to suicide in the Victorian countryside. Whereas in metropolitan Melbourne the male:female ratio has been generally declining, indicating that men and women were being increasingly subjected to the same kind of psycho-social stress, in the countryside of Victoria it was the men who were at greater risk, presumably due to the differential psycho-social stress.

If one relates this finding to the rural crisis since the late 1970s then it is possible to hypothesize that it was affecting men more than women and was a significant factor in the increase of male suicide in that period. This indirectly supports the general perception that the rural crisis of the past 10 to 15 years may indeed have increased the suicidal behaviour of men who are by virtue of their

structural position in the rural society, more likely to be affected by it. Also the mythology of the bush which confers on men, young and old, an expectation of ruggedness, prevents them from seeking help when they are under stress.

A Case Study of South Australia

In South Australia the Health Commission had gathered suicide statistics for 1982-86 for all local Government Areas (LGAs) as part of its Social health Atlas. Using this data, suicide rates were compiled for all LGAs[7] and are reported in Table 6.5 below. The findings confirmed the trend reported in Table 6.2 that the suicide rate in metropolitan Adelaide is higher than the countryside. For persons 15 years and above the overall suicide rate for metropolitan Adelaide was 17 per 100,000 population. The corresponding rate for the whole countryside was only 14 per 100,000.

These averages, however, camouflage a significant variation in the suicide rate between the Metropolitan Local Government areas and the non-Metropolitan Local Government areas. The inner city Local Government areas, for example, have significantly higher suicide rates than the outer city Local Government areas. In the countryside, predominantly rural areas of the Riverland and the Far North and Coober Pedy had significantly higher suicide rates than the other Local Government areas. The reasons for these variations were investigated and the following section reports findings of this exercise (Table 6.5).

---

7 In text.

Table 6.5
Suicide Rates by Inner, Middle, Outer and Country LGAs in South Australia

Area	Suicide Rate
Adelaide Stat. div	
Mean	17.03
Std. Dvn.	7.79
Inner city LGAs	
Adelaide	28.82
Burnside	15.43
Hindmarsh	30.22
Kensington & Norwood	25.20
Payneham	20.43
Prospect	20.85
St. Peters	17.20
Thebarton	43.81
Unley	14.45
Walkerville	17.23
West Torrens	21.30
Mean	23.77
Std. Dvn	8.79
Middle LGAs	
Brighton	17.20
Campbelltown	17.46
East Torrens	9.09
Enfield	11.40
Glenelg	18.86
Henley & Grange	22.45
Marion	13.75
Mitcham	12.92
Stirling	10.87
Woodville	15.97
Mean	15.20
Std. Dvn	3.90
Outer LGAs	
Elizabeth	18.30
Gawler	11.00
Munno Para	11.00
Noarlunga	14.89
Port Adelaide	16.67
Salisbury	12.17
Tea Tree Gully	9.67
Willunga	2.80
Mean	11.77
Std. Dvn	4.58
Country LGAs	
Riverland	22.58
Mt. Gambier	8.33
Pt. Lincoln	10.29
Pt. Augusta	8.69
Pt. Pirie	12.50
Whyalla	8.90
Far North & Coober Pedy	21.36
Other Country	13.23
Mean	14.13
Std. Dvn	5.96

Metropolitan Area

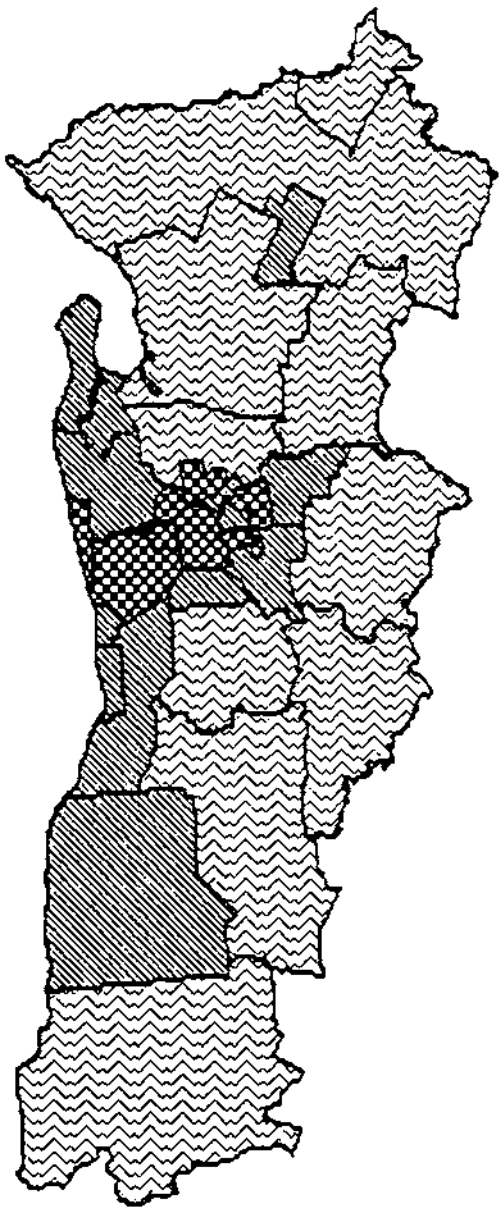
The suicide data by local Government Areas was used to plot a geographical distribution. The results reported in Map A show that the inner metropolitan LGAs (extending from the city centre to the west) tend to have the highest suicide rates and the outer LGAs in the north and south of the city as well as in the more affluent LGAs in the east, tend to have the lowest suicide rates. This pattern is quite distinct from the distribution of LGAs by income which shows that the eastern LGAs are relatively much more affluent than the LGAs in the North or the South which are the poorest. The western coastal LGAs tended to be the middle income areas. These findings are consistent with the findings of Meares, Kraiuhin and Benfield's[8] study of Melbourne metropolitan areas which have been reported earlier.

The comparison of LGAs by income levels and suicide rates clearly suggests that suicide rate, at least in metropolitan Adelaide is not correlated to income (see Map B). In other words the suicide rate is not correlated to the socio-economic status of the areas. To understand and possibly to explain this pattern further analysis was undertaken. A socio-economic and demographic profile using 28 indicators was prepared for the three groups of inner, middle and outer LGAs (see Table 6.6). A correlational analysis was then performed which revealed that all the major macro indicators of socio-economic status of the LGAs such as income educational status, welfarism, home ownership, property values and labour from hardship were not related to the suicide rates (see Table 6.7).

8 Meares, Kraiuhin & Benfield, op. cit.

MAP A

SUICIDE RATE: RATE PER 100,000:
ADELAIDE METRO LOCAL GOVERNMENT AREAS, 1986.



2.80 to 12.92	(10)
12.93 to 18.86	(12)
18.87 to 43.81	(8)

MAP B: ADELAIDE STATISTICAL DIVISION

HOUSEHOLD INCOME >$40,000 IN 1986

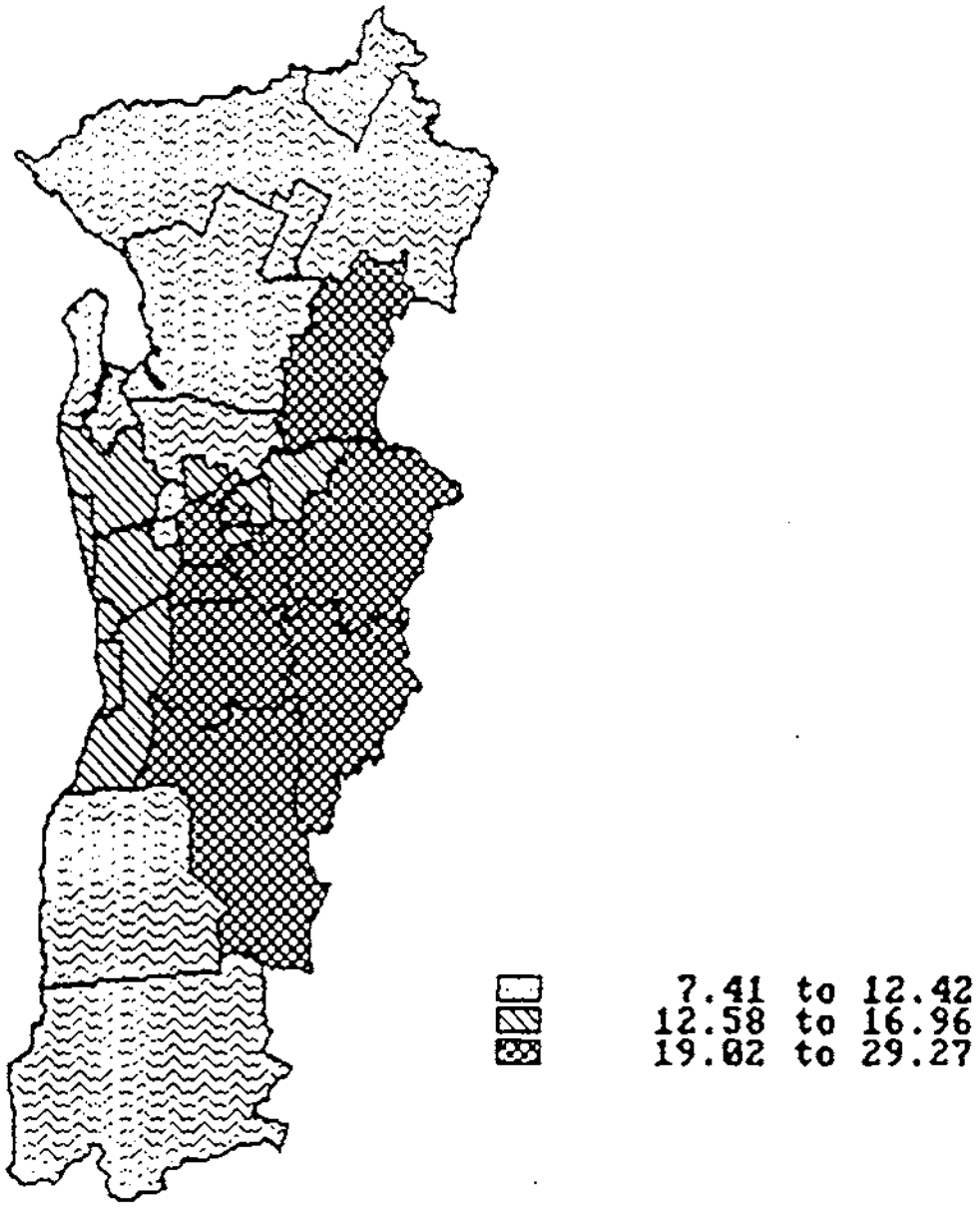


Table 6.6
A Socio-Demographic Profile of LGAs in South Australia
Grouped as Inner, Middle, Outer Metropolitan and Country LGAs

Variable	Suicide Rate			
	Inner	Middle	Outer	Country
Income > $40,000	16.39	19.45	12.81	10.48
	(5.75)	(7.07)	(4.83)	(2.08)
Population aged 65+	17.43	15.12	7.53	8.32
	(2.38)	(6.23)	(4.01)	(3.07)
Familism*	25.72	33.08	45.96	46.72
	(4.84)	(6.77)	(5.35)	(3.70)
Affluent Families*	35.06	39.29	38.48	36.13
	(4.50)	(6.26)	(5.82)	(2.71)
Deprived Families	17.67	15.43	18.04	19.51
	(3.65)	(4.08)	(4.79)	(1.78)
Education Status*	29.32	28.15	21.79	20.10
	(6.34)	(6.61)	(4.87)	(1.53)
Ethnic Composition*	27.59	23.85	23.72	22.88
	(2.09)	(3.52)	(2.72)	(5.92)
Welfarism*	8.88	7.70	11.74	15.55
	(3.41)	(4.23)	(7.68)	(6.28)
Owners	38.55	41.11	28.99	31.90
	(8.06)	(4.52)	(9.17)	(11.60)
Public Rental	6.56	7.98	15.42	25.71
	(4.91)	(8.64)	(16.14)	(16.70)
Owner Purchase	20.959	30.72	44.73	18.22
	(4.89)	(10.29)	(13.94)	(8.57)
Private Rent	29.76	16.43	8.24	15.51
	(8.55)	(7.37)	(3.40)	(8.80)
Density	19.19	14.96	5.68	-
	(5.34)	(8.63)	(5.27)	
Crime Rate	29.89	21.83	27.33	194.47
	(15.78)	(9.98)	(15.40)	(88.02)
Mortality	113.69	92.60	92.16	-
	(27.48)	(16.04)	(23.12)	
Value	100798	99877	66016	
	(25631)	(23314)	(10323)	-
Labour force Hardship	21.10	19.46	27.85	29.25
	(7.45)	(6.26)	(6.27)	(4.82)
Population	19890	35671	42933	40584
	(13781)	(28225)	(30050)	(70571)
Housing Quality*	4.54	6.59	5.55	5.78
	(1.94)	(3.23)	(1.98)	(2.62)
Males aged 15-30	30.04	25.37	25.20	13.39
	(3.77)	(2.14)	(3.18)	(2.75)
Persons aged 15-30	29.05	23.97	25.19	25.36
	(3.97)	(2.08)	(2.92)	(3.30)
Unmarried	35.80	28.09	23.73	27.19
	(5.36)	(2.06)	(3.40)	(3.52)
Widowed	5.43	5.58	4.58	5.30
	(3.92)	(2.91)	(2.29)	(1.90)
Divorced	6.44	5.16	5.16	7.41
	(1.46)	(1.46)	(1.46)	(1.83
Married	45.24	64.04	64.04	60.09
	(6.76)	(6.5)	(6.5)	(3.71)
Male/Female Ratio	93.33	99.5	99.50	113.40
	(9.17)	(1.89)	(1.89)	(23.07)
Middle aged males	9.65	9.95	9.95	13.80
	(1.18)	(0.76)	(0.76)	(2.77)
Middle aged persons	19.28	19.53	19.53	21.33
	(1.97)	(1.78)	(1.78)	(2.23)

Variables marked with an asterisk were based on an unweighted average of multiple variables.

Table 6.7

Correlations between Suicide Rate (Suicides/100,000) and Socio-Economic and Demographic Characteristics of the Areas

	Suicide Rate
For Metropolitan Areas	
	.3392
Income > $40,000	-.2088
Population aged 65+	.4328*
population aged 15-30	.6996*
Males aged 15-30	.7705*
Familism	-.6984*
Affluent Families	-.6051*
Deprived families	.4098*
Educational status	-.0434
Ethnic composition	.6342*
Welfarism	.2176
Housing Quality	-.4777*
Owners	.0894
Public Rental	.0542
Owner/Purchasers	-.6875*
Private Rental	.6874*
Density	.5676*
Crime Rate	.5308*
Mortality	.6109*
Value	.1044
Labour force h/s	.1442
Population	-.3291*
Unmarried (15 years +)	.7649*
Widowed (15 years +)	.4554*
Divorced (15 years +)	.4656*
Married (15 years +)	-.7394
Middle aged males (40-60 years)	-.1850
Middle aged persons (40-60 years)	-.2051
Mental Illness**	.6758*
For Country Areas	
Income > $40,000	-2.613
Population aged 65+	-.3310
Familism	.2062
Affluent Families	-.2382
Deprived Families	.2013
Educational Status	.0221
Ethnic Composition	.6420*
Welfarism	-.3266
Housing Quality	.2860
Labour Force h/s	.1334
Population	-.1040
Owners	.2019
Purchasers	-.5506
Public rental	-.4332
Crime Rate	-.2531

** Mental Illness was measured by admission to psychiatric wards per 1000 population

Source: S.A. Health Commission.

*Significant at .05 level.

However, a number of variables such as familism, housing quality, owner purchasers, population size and percentage married were negatively correlated. There was a significant and positive correlation between the population aged 65 and above and population aged 15-30 years (especially males), density, deprived families, mental illness, ethnic composition, private renters, crime rate, mortality, single, widowed, and divorced persons 15 years and above. Besides being consistent with Burnley's findings, these findings identify other socio-economic demographic and health conditions which are associated with high suicide rates.

The findings also have interesting theoretical implications. Ever since Durkheim published his now famous book on suicide, there has been a big debate about the centrality of sociological and psycho-pathological variables. Numerous psychiatric studies have tended to demonstrate the centrality of psycho pathologies such as depression, alcohol dependence, schizophrenia, personality disorders. On the other hand, the sociological studies have consistently shown the centrality of sociological factors such as the stability and durability of social relations, divorce and widowhood in suicidal behaviour. The data reported in Table 6.7 above provides an interesting opportunity to test the validity of this debate.

As indicated above, a number of macro indicators of socio-economic status (e.g. income, education, labour force stress, housing value, home ownership, public rental) were not significantly correlated to the suicide rate. But the indicators of social and physical environment such as mortality, density, social deprivation, housing quality and ethnic composition and private rental were negatively associated with this suicide rate. Marital status and age had a distinct pattern of relationship. The suicide rate was positively correlated with single, widowed and divorced. As for age the areas with higher percentage of 65 years and older and young persons aged 15 to 30 had significantly high rates of suicide. There was no correlation between suicide rate and the middle age groups (40 to 60 year olds).

The suicide rate was also statistically significantly correlated with the mental illness rate, which also suggests that besides socio-genic factors already

mentioned psychogenic factors may also play an important role in the production of suicidal behaviour in the community. However, as this analysis is limited to ascertaining correlations of suicide and not its causes, what can be claimed is that there are some very clearly defined sociological and psycho-social variables which are significantly correlated with suicidal behaviour. Some of these correlations (e.g., marital status, economic hardship) are consistent with Durkheim's theory of social integration and suicide.

These findings also confirm the findings reported earlier in Chapter 5 that in Australia suicide rates have significantly increased among the young (15 to 30 years of age) and the old (65 and above). They further confirm the findings that divorce and singlehood are positively associated with the suicide rate. From the above it can be concluded that in metropolitan Adelaide as in Sydney the high density, high crime rate in inner city areas with greater concentrations of migrants, single, divorced, widowed, young males and older persons tend to have higher suicide rates. The data reported for Adelaide in the chapter provides considerable support for the theoretical position of Durkheim and his students.

Temporal Dimensions of Suicidal Behaviour

A great deal of social life is structured along temporal cycles. Day and night are associated with many distinct social activities. Similarly, seasons and lunar phases have been attributed to variations in moods and tempo of social life. Given these facts that in the popular folklore temporal cycles are seen as influencing social activities, it seems reasonable to ask whether or not they also influence suicidal behaviour.

In a recent study of suicides committed in Sacramento County, California between 1925 and 1983, Maldonado and Kraus report that 'suicide occurrence varied substantially by time of the day, the fewest suicides occurred during the early hours of morning from 4.00 to 8.00 am. Suicide occurred most frequently on Monday for males and females and for most age groups. There was no consistent

pattern in variation by month or lunar phase. The study also found that suicides occurred at an almost equal frequency during different seasons.[9]

The findings of Maldonado and Kraus' study are largely consistent with the findings of previous studies that suicide occurs most frequently on Mondays;[10] that there is only a small variation in suicide frequency by month of the year;[11] and that suicide occurrence is at a maximum during the spring and summer and at a minimum during autumn and winter.[12]

A systematic analysis of suicides committed in Australia between 1968 and 1981 was conducted in order to examine the influence of various temporal cycles on suicidal behaviour. The findings reported in Table 6.8 reveal that men suicide most frequently on Mondays and women on Mondays and Tuesdays. That Monday has the highest occurrence of suicide in Australia is consistent with the findings reported in other international studies.

Table 6.8
Suicide in Australia 1968-1981: Deviation from Average by Day of the Week

Day of Week	Deviation from Average			
	Male		Female	
	No	%	No	%
Sunday	-76	-3.4	-14	-1.5
Monday	+176	+7.9	+38	+4.0
Tuesday	+53	+2.3	+40	+4.2
Wednesday	-96	-4.3	-43	-4.5
Thursday	-9	-0.4	-18	-1.9
Friday	-18	-0.8	+2	+0.2
Saturday	-31	-1.4	-7	-0.7

9 Maldonado, G. & Kraus, J.F. 1991, 'Variation in suicide occurrence by time of day, day of the week, month and lunar phase', *Suicide and Life-Threatening Behavior*, 21, pp. 174-188.

10 Lester, D. 1971, 'Seasonal variation in suicide deaths', *British Journal of Psychiatry*, 118, pp. 627-8; MacMahon, K. 1983, 'Short-term temporal cycles in frequency of suicide, United States 1972-1978', *American Journal of Epidemiology*, 117, pp. 744-750.

11 Lester, D. 1979, 'Temporal variation in suicide and homicide', *American Journal of Epidemiology*, 109, pp. 517-20; Kevan, S.M. 1978, 'The seasonal behaviour of Canadians', *Canadian Mental Health*, 26, 16; Maldonado and Kraus, op. cit.; Barraclough, B.M. & White, S.J. 1978, 'Monthly variation of suicidal, accidental and undetermined poisoning deaths', *British Journal of Psychiatry*, 132, pp. 279-282.

12 Lester, D. 1971, op. cit.; Zung, W.K. & Green, R.L. Jr. 1974, 'Seasonal variation of suicide and depression', *Archives of General Psychiatry*, 30, pp. 89-91; Maldonado and Kraus, op. cit.

Unlike the American studies, the Australian data show that there is a considerable variation in suicide occurrence by month of the year. For men, October has the highest number of suicides followed by November, and April has the lowest occurrence followed by May. Among women, September has the highest occurrence of suicide and February the lowest (see Table 6.9).

Table 6.9
Suicide in Australia 1968-1981: Deviation from Average by Season and Month of the Year

Season and Month	Deviation from Average			
	Male		Female	
	No	%	No	%
Summer				
December	-24	-1.9	+10	+1.8
January	+15	+1.2	+10	+1.8
February	-58	-4.5	-93	-16.8
Autumn				
March	+33	+2.6	-3	-0.5
April	-141	-10.9	-18	-3.2
May	-68	-5.3	+15	+2.7
Winter				
June	-70	-5.4	-13	-2.3
July	+62	+4.8	+30	+5.4
August	+50	+3.7	-1	-0.1
Spring				
September	+3	+0.2	+35	+1.6
October	+118	+9.1	+9	+3.8
November	+77	+6.0	+10	+1.8

The variations by seasons show that spring had the highest occurrence for both sexes followed by winter. Men committed fewest suicides in autumn and women in summer. These variations are not large but the pattern they suggest is that suicide occurrence is at a maximum during the spring and winter months and at a minimum during the autumn and summer months (see Table 6.10).

Table 6.10
Suicide in Australia 1968-1981: Average Daily Suicide by Seasons

	Average Daily Suicide			
	Male		Female	
	Daily Average	% Deviation from Average	Daily Average	% Deviation from Average
Summer	90	-2.2	37	-5.1
Autumn	88	-4.3	39	0
Winter	93	+1.1	40	+2.5
Spring	97	+5.4	41	+5.1

It is easier to identify the distribution of suicide by temporal cycles than to explain the pattern of distribution. The general hypothesis about the Monday peak is that somehow it is related to employment. The fact that this is especially so for men would tend to support this hypothesis since the male participation rate in the labour force is higher than women. It was especially so in the years for which the Australian data have been examined. However, as more and more women enter the labour force the Monday peak is likely to appear among them as well and the data suggest this to be the case in Australia. It is more problematic to explain the high and the low by months of the year. One possible line of enquiry worth pursuing for further analysis is whether or not proximity or coinciding of some major events such as Christmas, school holidays and the end of the academic year produce the circumstances which may be conducive to suicidal behaviour among the more vulnerable groups in society in the spring months due to special stresses which are associated with these events.

CHAPTER 7

WORK, OCCUPATION AND SUICIDE

At the heart of Durkheim's theory of suicide was his aetiological classification of suicide which was rooted in the degree of regulation and integration. Because the aetiological underpinnings of the theory were a social environment or milieu the suicide rate, Durkheim argued, would differ among different groups and classes. Suicide depended on certain states of the social environment. What separated the social environments was the degree of social integration. This he regarded as a critical variable and postulated that 'suicide varies inversely with the degree of integration of the social groups of which individuals form a part'.[1] He postulated that:

> Under adverse social conditions, when men's social context fails to provide them with requisite sources of attachment and/or regulation, at the appropriate level of intensity, then their psychological or moral health is impaired and a certain number of vulnerable, suicide prone individuals respond by committing suicide.[2]

From his empirical data he inferred that in modern society two major factors which affected suicide rates were economic and conjugal integration. He posited a positive correlation between suicide and economic integration as well as between suicide and conjugal integration. This and the following chapter will explore these relationships in the Australian context.

Economic Integration and Suicide

The relationship between economic integration and suicide is usually explored and investigated through the economic activities undertaken by the individuals in modern society namely work and occupation. Durkheim himself

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1 Lukes, S. 1971, *Emile Durkheim*, Basic Books, New York, p. 217.
2 Lukes, op. cit., p. 217.

has observed that one of the strongest protections against suicide was to belong to an organized work force because gainful employment enhances an individual's integration into the society and thus acts as protection from suicide and other forms of social disorganizations. Unemployment or work loss on the other hand weakens the individual's social integration, deprives him/her of social role and status and increases social isolation, all of which are positively associated with suicide. These hypotheses have been explored by several empirical studies over the past 50 years and their findings generally bear out Durkheim's predictions. A summary of these findings is given in Table 7.1.

In a controlled case study of work and suicide Shepherd and Barraclough, after examining the work history of 75 completed suicides and a control, group conclude that:

> The suicides showed more unemployment, more absence through illness, had more frequent job changes and held their jobs for a shorter period ... Overall the findings appear to once again validate Durkheim's prediction in the protective value of belonging to a workforce. Work loss weakens the subject's social integration by loss of integration with the work force, deprives him of social role and status, and may well increase his isolation, all of which may drive him to despair and suicide.[3]

Investigations in Australia have also revealed a strong correlation between suicide and employment. Windschuttle, in his study of unemployment in Australia, found that among males the peaks and troughs in the male suicide rate correlate very closely to the level of unemployment.[4] Similar findings have been reported by other studies.[5]

As mentioned previously, in Australia the period of increasing youth suicide strongly corresponds to the high youth unemployment rate. Between 1970 and 1987 the unemployment rate increased about six fold from 2.9 percent to 18.1 percent for 15 to 19 year old males and from 3.6 to 19.5 percent for 15 to 19 year old females. The overall suicide rate for 15 to 19 year olds in the same period increased by 86 percent among men and remain unchanged for women (see Chapter 5).

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3 Shepherd, D.M. & Barraclough, B.M. 1980, 'Work and suicide: an empirical investigation', *British Journal of Psychiatry*, 136, pp. 469-478.

4 Windschuttle, K. 1979, *Unemployment*, Penguin Books, Ringwood.

5 Martina, A., op. cit.; Hassan and Tan, op. cit.

Table 7.1

Aggregate-longitudinal Studies of Suicide and Unemployment (or Associated Indicator of Economic Recession): Evidence from the Literature

Author(s)	Place	Period	Statistical Procedure*	Findings
Thomas (1927)	England	1853-1913	C	Index of business conditions negatively correlated with suicide rate
Eyer (1977)	U.S.A.	1900-1975	-	Graph of trends in suicide rate by age and unemployment rate. "Suicide typically peak(s) within weeks of the peak of the unemployment rate in the business cycle"
Ogburn and Thomas (1922)	U.S.A.	1900-1920	C	Negative correlations between cyles of suicide rates and cycles of business conditions
Henry and Short (1954)	U.S.A.	1900-1947	C	Suicide rate of males correlated negatively with fluctuations in business (further correlations given for age-sex, race-sex categories)
Cook et al (1980)	U.S.A.	1900-1975	C	Suicide and employment rates significantly negatively correlated (zero lag)
Mark (1979)	U.S.A.	1900-1975	C	Suicide and unemployment rates significantly positively correlated (zero lag)
Harlburt (1932)	U.S.A. (cities of over 100,000 population)	1902-1925	-	Presents chart suggesting "a degree of causal relationship between business activity and suicide"
Windschuttle (1979)	Australia	1905-1976	-	Graph of male suicide rate and percent of males unemployed. Claims that "the peaks and troughs in the male suicide rate correlate very closely to the level of unemployment"
Stearns (1921)	Massachusetts U.S.A.	1908-1918	-	Mean annual percentage of unemployment highly correlated with suicide rate
Dublin and Bunzel (1933)	U.S.A.	1911-1931	C	
	Massachusetts	1910-1931	C	Inverse correlation between suicide death rate and index of business prosperity
	U.S.A. 10 Eastern States, U.S.A.	1910-1931	C	

Lendrum (1933)	Detroit	1912-1930	-	Graph of annual suicide rate and stock market averages. Claims "there is little apparent correlation between the two curves", but no statistical test is made
Pierce (1967)	U.S.A.	1919-1940	C	Percent of labour force unemployed correlated at zero lag and 3 year lag with white male suicide rate, but presence of autocorrelation detected. Public definition of economic situation (index based on common stock prices) and age-standardised white male suicide rate correlated with one year lag - no evidence of autocorrelation
Vigderhous and Fishman (1980)	U.S.A.	1920-1969	MR	Zero-order correlation between unemployment and suicide rates (M and F) highly significant. Regression analysis shows that unemployment "had a dramtic impact upon suicide rates of ... males", particularly during period 1920-1940
Ahlburg (1983)	Germany, Belgium Netherlands England and Wales, Switzerland Austria, U.S.A., Canada, France, Italy	1921/2-1931/2	MR	Strong inverse relationship across countries between % change in suicide and % change in Several economic indicators, including unemployment. England and Wales and Italy ahd a significantly higher rate of change in suicide than all other countries
Swinscow (1951)	Great Britain	1923-1947	C	Significant correlation between *N* of male suicides and *N* of male unemployed
MacMahon *et al* (1963)	U.S.A.	1929-1959	-	"Suicide rates for males in the 45-54 year age group show a remarkable correlation with total unemployment rates in the same year". Presents graph but no statistical test
Stack (1981)	U.S.A.	1933-1970	MR	Significant association between unemployment and suicide rates (M and F combined). Less pronounced in post-war than in pre-war period

Marshall and Hodge (1981)	U.S.A.	1933-1976	MR	Adjusted white male suicide rate positively associated with unemployment rate. Absolute change *per se* not a significant influence on suicide rate
Brenner (1979)	England and Wales	1936-1976	MR	Short-term changes in unemployment as a measure of economic loss are the most important source of influence on annual fluctuations in mortality. Suicide shows an increase within a year of unemployment increasing (no data provided).
Brenner (1977)	U.S.A.	1940-1973	MR	Increases in unemployment are related to higher rates of suicide
Hammermesh and Soss (1974)	U.S.A.	1947-1967	MR	Significant association between unemployment and suicide even during relatively midl recessions of postwar periods - strongest for older age groups
Marshall (1970)	U.S.A.	1948-1972	MR	Significant positive correlation between uenmployment and suicide rates among white males aged 65-74. However, using MR analysis, unemployment's estimated impact on suicide rate, though positive, is not significant
Ahlburg and Schapiro (1984)	U.S.A.	1948-1976	MR	Significant impact of `labour market tightness' (i.e. unemployment rate normalised for the changing age structure of the labour force) on male suicide rates, particularly for males aged 45-64
John (1982)	West Germany	1950-1980	MR	"The level of unemployment apparently does not influence the suicide rate..."
Brenner (1983)	England and Wales	1954-1976	MR	Suicide rate not associated with overall unemployment rate, but significant relationship with 20-40 year old male unemployment ratio at zero lag
	Scotland	1955-1976	MR	A positive relationship between overall unemployment and suicide rates at 2 year lag only (but relationship shown to be unreliable by Chow test). Significant relationship with unemployment males 40+ ratio at zero lag

Kreitman and Platt (1984)	Great Britain	1955-1980	C	Significant *negative* relationship over whole period between male unemployment rate and total male suicide rate. However, unemployment and suicide by means other than domestic gas found to correlate *positively* and significantly correlated with total suicide rate
Waldron and Eyer (1975)	U.S.A.	1960-1970	-	Doubling of suicide among 15-24 year old males "cannot be attributed to rising unemployment"
Anttinen *et al* (1983)	Finland	1960-1979	C	Significant *positive* correlation between unemployment and suicide rate among males aged 15-29; significant *negative* correlation among females aged 50-64; all other correlations positive but non-significant
Sainsbury *et al* (1980)	Europe (18 countries)	1961-1963 to 1972-1974	C	Nonsignificant positive correlation between changes in unemployment and changes in suicide rate
Catalano *et al* (1982)	Monroe County NY U.S.A.	1962-1972 (by month)	C	No relationship between *monthly* unemployment rate (M and F) and total, M or F suicide rates
Boor (1980)	West Germany, Sweden, Italy Japan, U.S.A., Canada, France Great Britain (England & Wales)	1962-1976	C	Significant correlations between suicide and unemployment rate in U.S.A., Canada, Japan and France. Significant *negative* relationship in Great Britain

Source: Adapted from Platt, S. 1984, 'Unemployment and suicide behaviour: a review of the literature', *Social Sciences and Medicine*, 19, 93-115.

The overall suicide trend in Australia since 1900 also shows a strong correlation between the unemployment and suicide rate. During the Depression Australia experienced a very high unemployment rate and a very dramatic increase in the male suicide rate which reached 24 per 100000 population in 1930. Female suicide rates, however, were not affected to the same degree (see Chapter 3, Table 3.2). This trend was confirmed by the results of the statistical analysis reported in Chapter 3 which showed that unemployment was negatively correlated with suicide rate for males but for females the correlation was not significant (see Tables 3.3 and 3.4 in Chapter 3).

A possible sociological explanation of this difference is the differential effect of unemployment on male and female family roles. The high unemployment during the depression seriously eroded the customary male role as the economic provider for the family whereas the traditional female role as mother and housewife became more important. Another but related explanation is the different socialization patterns of women and men. Women are socialized into domestic roles which enable them to find meaningful activities in the domestic domain which reduces their sense of loss, loss of status, loss of self-esteem and loss of social contacts which is also experienced by unemployed men who are predominantly socialized in instrumental social roles. The socialization patterns, in other words, provide different ways for men and women to deal with the insecurity of unemployment.

The evidence gathered from the records of the South Australian Coroner's Court reinforces the strong association between suicide and unemployment. As Table 7.2 below shows, out of 162 suicides committed in South Australia in 1982 only 29 percent were in current employment. The pensioner, retirees and home duties persons made up almost 67 percent of the suicides. These findings are consistent with the national and international evidence which, as has been indicated earlier, show that employed persons make up only one third of the suicides.

The above evidence lends support to the sociological hypothesis that gainful employment in an organized labour force enhances an individuals' integration into society and thus acts as protection from suicide and other forms of social disorganization.

Table 7.2

Labour Market Status of 1982 Suicide Cases in South Australia

Occupational Indicator	Number	Percentage
Old Age Pensioner	30	18.1
Invalid Pensioner	11	6.6
Widowed Pensioner	1	.6
Retired	9	5.4
Prison Inmate	1	.6
Unemployed	33	19.8
About to Resign	1	.6
Home Duties	23	14.0
Student	5	3.1
Employed	40	24.0
Self Employed	6	3.6
Unclear	2	3.6
Total	166	100

Source: South Australian Coroner's Court, Adelaide

Suicide and Occupation

Another approach to investigate the relationship between labour force stakes and suicide has focused on occupation. There are now a number of studies on this subject which have focused on the variation in the suicide rates according to occupational status, status change, alienation and occupation and occupational mobility.[6]

6 Bedian, A.G. 1982, 'Suicide and occupation', *Journal of Vocational Behaviour*, 21, pp. 206-223; Reinhart and Linden 1982, 'Suicide by industry and occupation: a structural change approach', *Suicide and Life-Threatening Behavior*, 12, p. 1; Breed, W. 1963, 'Occupational mobility and suicide among white males', *American Sociological Review*, 28, p. 2; Powell, E.H. 1958, 'Occupation status and suicide: towards a redefinition of anomie', *American Sociological Review*, 23, p. 2; Platt, S. 1984, 'Unemployment and suicide behaviour: a review of literature', *Social Science and Medicine*, 19, p. 2.

In spite of the methodological and statistical problems which are often inherent in the study of occupation and suicide,[7] findings of the existing studies provide some useful and interesting insights on the relationship between suicide and occupation. Most studies, if not all, suggest that there is no linear correlation between occupational status and incidence of suicide, that is, the higher the status, the higher the suicide rate. The evidence indicates a much more complex relationship between the two phenomenon in the modern industrial societies.[8]

Studies of downward occupational mobility or 'skidding' have found it to be an important factor in explaining variations in suicide rates in the United States. The underlying theoretical rationale for this relationship besides Durkheim's notion of 'declassification' is also found to be related to Parsons' theory of the instrumental role of males through which most men seek status as well as relate themselves to the world.[9] Moreover, vocation determines the individuals' relationship to the larger society. The whole occupational sphere is seen to be dominated by success. As Powell puts it, 'success is derived from a larger conceptual framework which defines the nature of man in terms of the active mastery of existence'.[10] Under conditions of downward occupational mobility the 'self-image' is impaired and leads individuals to perceive their downward mobility as a sign of community rejection and negative evaluation of their self-worth and consequently increases their sense of alienation and anomie and reduces their level of social integration in the society.[11]

Besides, unemployment and downward occupational mobility which impair individual's self-image, and self-esteem, retirement is also seen as producing similar effects in modern societies especially for men. According to Powell

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7 For a discussion of their problems see Bedian, op. cit.
8 See Breed, op. cit.
9 See Powell, op. cit.
10 Powell, op. cit., p. 139.
11 See Breed, op. cit.; Powell, op. cit.

> Retirement in our society is a virtual excommunication. Men with no history of sickness develop chronic illnesses after retirement; it is certainly plausible to suggest that such unemployment is a primary and not merely precipitating factor in the suicide of the aged male. To be without work is to live without purpose.[12]

Other studies have focused on workplace, specific job characteristics (such as job content and worker autonomy, possibility for training and promotion, job security and earnings) and suicide. Their findings show that risk of workplace suicide increases with increasing age and men suicide significantly more than women. Sudden changes in work organization, conflict of loyalty arising from work change, reactions to pain and suffering following a physical work injury and the economic and status deprivation resulting from disability and unemployment are also found to be correlated to higher propensity to suicide. Men in military service and primary industries appear to show higher risk of suiciding at the work place.[13]

Occupation and Suicide in Australia

Given the complex relationship between occupation and suicide, as discussed in the preceding section, it is difficult to formulate specific hypotheses which can be tested using the available data on occupation of suicide victims. The most one can do is to examine whether or not there is any apparent pattern and then make an attempt to explain it theoretically. An attempt was made to do this. Suicide data by occupation, sex and age was obtained from The Australian Bureau of Statistics for 1986 and then analyzed. The result of this analysis is reported in Table 7.3 below.

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12 Powell, op. cit., p. 136.

13 Conroy, Carol 1989, 'Suicide in the workplace: incidence, victim characteristics, and external cause of death', *Journal of Occupational Medicine*, 31, p. 10; Olsen, J. and Lajer, M. 1979, 'Violent death and unemployment in two trade unions in Denmark', *Social Psychiatry*, 14, pp. 139-145; Robinson, J. 1988, Hazardous occupations within in job hierarchy', *Industrial Relations*, 27, p. 2; Brodsky, Carrol M. 1977, 'Suicide attributed to work', *Suicide and Life-Threatening Behavior*, 7, 4, pp. 216-231.

Table 7.3

Suicide Rate by Occupation and Age Australia 1986

	Males				
Occupational Category	15-24	25-34	35-44	45-54	55-64
All Categories	21.9	28.3	23.5	24.2	24.6
Professional, Technical	28.5	12.6	18.0	13.7	31.5
Administrative, Managerial	10.1	15.4	17.3	15.8	25.8
Clerical	12.2	9.9	12.1	23.4	28.4
Sales	16.9	14.5	10.4	16.6	61.2
Farmers, Fishermen	35.6	15.2	16.6	31.1	53.8
Transport, Communication	63.8	29.1	31.6	16.2	138.7
Tradesmen	25.3	31.1	36.5	24.4	76.9
Services, Sport & Recreation	27.4	63.3	24.1	14.9	33.3
	Females				
Occupational Category	15-24	25-34	35-44	45-54	55-64
All Categories	5.5	6.2	7.5	10.8	8.1
Professional, Technical	6.3	10.4	21.2	9.9	-
Administrative, Managerial	23.6	16.1	9.0	30.9	-
Clerical	4.1	4.2	6.5	5.2	-
Sales	5.7	3.5	-	4.7	-
Farmers, Fishermen	10.7	-	-	-	29.7
Transport, Communication	-	-	-	23.2	-
Tradesmen	4.2	-	18.0	3.7	-
Services, Sport & Recreation	4.3	8.4	2.3	6.6	9.3

Source: Australian Bureau of Statistics, Canberra, special runs.

The evidence in the table confirms the almost universal pattern that the overall suicide rate for men is about 3-4 times higher than women in each of the five age categories. Among men the suicide rate is higher and in some instances (e.g. men aged 15 to 24 and 55 to 64) very significantly higher for blue collar occupations (e.g. transport/communication, tradesmen and service, sport and

recreation occupations). Men in professional/technical occupations in the age groups 15 to 29 and 55 to 64 also tend to have a higher rate.

The general pattern, as far as men are concerned, appears to be that those in blue collar occupations which are also characterized by less job autonomy, greater external supervision, less on the job training, poorer promotion possibilities, lower wage levels and greater sensitivity to market forces, tend to have higher suicide rates and their rates increase very significantly in the age category 55 to 64. As for women, notwithstanding limitation of the data (arising from frequent non-reporting of occupation in the death registration form) the suicide rates tend to be higher for the white collar professional occupations in age groups 25 to 44. The data also shows that the small number of women who are involved in farming, communication/transport and technical trades occupations tend to have higher suicide rates.

In order to further check these findings an attempt was made to ascertain the suicide rate for specific occupations. This analysis was undertaken only for males who had suicided between 1968 and 1981 because of the unavailability of corresponding data for women. After computing an average yearly rate (between 1968-81) 1976 Census occupational data was used to compute the suicide rate for specific occupations and, where this was not possible to do, suicide rates for closely related occupational categories were computed. The results of this exercise are reported in Table 7.4 below. The information given in the table should be taken only as an approximate measure of the occupational suicide rates because of the biases inherent in recording and disaggregation of occupational data. Bearing in mind these qualifications, the data given in Table 7.4 largely confirms the findings reported in Table 7.3.

Table 7.4
Occupation and Suicide Rate, Australia 1968-1981
Annual Average Suicide for Males Only
(actual numbers shown in brackets)

Occupation	Annual Average Suicide Rate per 100,000	
Sailors	58.2	(46)
Nurses	55.7	(55)
Labourers	53.4	(1615)
Fisherman	47.4	(45)
Machine operators	45.1	(468)
Hairdressers, barbers, beauticians	39.9	(34)
Artists, entertainers, writers	39.7	(118)
Waiters, domestic servants	34.7	(414)
Railway workers	34.6	(178)
Doctors	34.5	(83)
Construction workers	33.3	(509)
Ship officers, airline pilots	29.8	(28)
Miners	29.6	(130)
Hospital attendants, nursing aids	28.7	(49)
Farm workers, hunters, trappers	28.2	(385)
Medical technicians	28.0	(50)
Lumberjacks	27.1	(35)
Bus/tram drivers	26.4	(647)
Farmers, farm managers	23.6	(627)
Scientists	23.5	(66)
Production workers	22.9	(550)
Transport workers	22.4	(107)
Lawyers	22.2	(37)
Printers	22.0	(97)
Carpenters	20.1	(346)
Sales persons	18.8	(580)
Food processing workers	18.5	(198)
Firemen, policemen	18.2	(126)
Clothing workers	17.8	(85)
Managers	17.2	(784)
Clerical workers	16.5	(718)
Architects, draftsmen, surveyors	15.6	(74)
Dentists	15.5	(9)
Electricians	15.3	(291)
Technicians	13.3	(96)
Armed Force Workers	13.0	(105)
Potters, glass makers	12.1	(14)
Teachers	11.6	(146)
Engineers	9.7	(46)
Pastors (religious workers)	9.1	(14)

The highest rates of all are to be found amongst those occupations involved in heavy manual or physical work or occupations in health care. The

lowest rates are amongst professional, managerial, crafts, clinical occupations and armed forces. There are exceptions to this finding which show airline pilots doctors, medical technicians, shops officers and professionals in the Arts tend to have high suicide rates. The general pattern suggested by the data is that for the professional occupations the incidence of suicide is higher in some and low in others and for the lower status blue collar occupations the rates tend to be significantly higher.

This again suggests that occupations which are generally high status had good career paths, are well paid and are not dangerous, have lower suicide rates. Whereas the unskilled occupation with little job autonomy, poor earnings and least job security and poorer prospects for career mobility have higher suicide rates. One can argue that persons in professional types of occupations enjoy greater self-esteem and feel secure in their jobs and consequently have higher degrees of social integration and low suicide rates. The opposite is the case for people from working class, manual, blue collar occupations and consequently they have higher suicide rates.

The existing evidence suggests that macro-economic conditions constitute an important antecedent variable in the causal chain leading to suicidal behaviour. At the micro level more evidence is still required to establish a direct link between the individual references of unemployment and suicidal behaviour. Only systematic longitudinal studies can provide a definite answer to this problem. That some occupations are more hazardous, stressful and suicide prone also requires further substantiation. This can again be done only through systematic studies which control the types of individuals who enter various occupations and industries. There are at present very few studies which address this issue and the ones which exist still focus on the occupational and/or industrial workforce at one point in time.[14]

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14 For example see Karcher, C.L., and Linden, L.L. 1982, 'Is work conducive to self-destruction?', *Suicide and Life-Threatening Behavior*, 12, p. 3; Reinhart and Linden, op. cit.; Sheppard and Barraclough, op. cit.; Conroy, op. cit.; Robinson, op. cit.

In spite of fairly consistent evidence of an association between work, non-work and suicidal behaviour, the nature of this association, as Platt[15] has pointed out after an extensive review of relevant literature, remains highly problematic. The evidence reviewed in this chapter suggests that work and non work, occupation and vocation are important factors in explaining variations in suicide rates and lend support to Durkheim's hypothesis that membership of an organized labour force enhances an individual's degree of social integration and consequently acts as an important protection against suicide.

15 Platt, op. cit.

CHAPTER 8

SUICIDE AND THE FAMILY

The nexus between conjugal status and suicide has been another major focus of sociological analysis. Emile Durkheim in his study of suicide argued that after the age of 20 married persons enjoyed a greater 'coefficient of preservation' because of the social and emotional stability and security provided by the 'family society'. His rationale was that married life provided a sense of cohesiveness and support which was unavailable to the unmarried, widowed or divorced persons. In his analysis he demonstrated that the presence of children in marriage tended to increase the 'coefficient of preservation'. Divorce disrupted this state of cohesiveness and therefore higher divorce rates were significantly associated with higher suicide rates.[1] Several sociological studies have attempted to test Durkheim's hypothesis over the past fifty years and generally found evidence which lends support to it.

In a conceptually well focused study, Stack has tested Durkheim's proposition as it relates to social and domestic integration in the family institution. He used a multiple regression model to analyze data from 50 American states in order to establish whether a society that is characterized by a high incidence of divorce is low in social integration with respect to the institution of the family. The results of his study indicate that the incidence of divorce is closely associated with the rate of suicide even after the control for the influence of the effects of age composition, ethnicity, the rate of interstate migration and income. A one percent increase in divorce was found to be associated with a .54 percent increase in the suicide rate.[2]

Stack's study builds on the research on the psychological state of the divorcee which shows that divorcees are encompassed by a deep sense of disorientation and hurt surrounding the dissolution of marriage. They relinquish a large measure of self-

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1 Durkheim, pp. 179-80.

2 Stack, Steven 1980, 'The effects of marital dissolution on suicide', *Journal of Marriage and the Family*, 42, 83-92.

discipline (acquired through meeting the needs of other family members), the loss of supportive companionship of spouse and/or children and friends, increased sexual tensions and a sense of guilt from the perceived self-produced loss of spouse through divorce.[3] These psychological processes produce a deep sense of anomie which reduces social integration and produces what Durkheim called 'the destructive state of egoism'.

A detailed clinical case study of the relationship between marital separation and divorce has been reported by Jacobson and Portuges. This study was based on the analysis of data gathered from the applicants to a crisis clinic in Los Angeles. The age range was 18 to 67 years and most of the applicants (67%) were women. Jacobson and Portuges view separation and divorce as a process rather than as if it were a single event. In their analysis of the 'crisis of uncoupling' the authors provide three marital dissolution categories. These are firstly couples still together but 'seriously discussing' separation or divorce; secondly those couples who have recently separated and finally those who have been long-term separated.[4]

Jacobson and Portuges hypothesized higher rates of suicide among the 'just separated' category. Their reasoning was influenced by a psychological theory which explains suicidal behaviour in terms of inwardly directed aggression. They predicted a variety of responses whereby any event or 'inter-spouse transaction' would raise the level of anger either outwardly expressed or internalised which would increase suicidal potential. Loss of dependence, hostility from spouse, vacillation regarding the decision to divorce or the prospect of permanent separation, all contribute to inwardly directed and/or self-destructive behaviour. The high risk or crisis levels of self aggression appear to be most intense up to six weeks after the 'life event' of separation or divorce.[5]

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3 Stack, op. cit.; Hassan, R. & Carr, J. 1989, 'Changing patterns of suicide in Australia', *Australian and New Zealand Journal of Psychiatry*; Hassan, R. 1983, *A Way of Dying: Suicide in Singapore*, Oxford University Press, Kuala Lumpur; Dorpat, T. et al. 1965, 'Broken homes and attempted and completed suicide', *Archives of General Psychiatry*, 12, 213-216; Gibbs, J.P. 1969, 'Marital status and suicide in the United States: a special test of the status integration hypothesis', *American Journal of Sociology*, 74, 521-533; Maris, R.W. 1969, *Social Forces in Urban Suicide*, Dorsey Press, Homewood, Ill.; Schmid, C.F. & van Arsdal, D. 1955, 'Completed and attempted suicides', *American Sociological Review*, 20, 273-283.

4 Jacobson, G.F. & Portuges, S.H. 1978, 'Relation of marital separation and divorce to suicide: a report', *Suicide and Life-Threatening Behavior*, 8, 217-224.

5 ibid.

The implications arising from their study address the broader issue of the relationship between interpersonal hostility and suicide potential. They suggest a possibility that the greater the ego's inability to respond to hostility the greater the introjected hostility and the suicide potential.

Children may contribute to, receive, express or retain levels of hostility during the fragmented environment of marriage dissolution. While not focussed upon in that sense, Kozak and Gibbs analyse the relationship between the presence of dependent children and suicide in married parents. They found that while married persons with dependent children experience the lowest average rate, they also had a larger mean number of children than the population as a whole and tended to have either children at a very young age or at an older age in life.[6]

Those who argue that the presence or absence of children is a crucial variable conclude that parental status is of greater importance in inhibiting suicide than marital status alone. Lack of data providing details about the existence of dependent children among the suicide population presents analytical problems, especially in isolating other variables like gender or social class, to determine whether there is any basis for the claim.

Kozak and Gibbs in their study contradict contemporary notions that an increasing number of children in a marriage tend to inhibit suicide potential. The authors refer to a study by Gibbs and Becker which focussed on the communication of suicidal ideas measured by marital status and the number of dependents of their subjects.[7] Implicit in the findings is that increasing communication led to constraining actions on the part of family members. This increased communication factor did not prevent the suicides but served as an indicator that communication of intent increases with the total number of dependents in the marriage.

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6 Kozak, C. & Gibbs, J. 1979, 'Dependent children and suicide of married parents', *Suicide and Life-Threatening Behavior*, 9, 2, 67-75.

7 Gibbs, J. & Becker, H.B., 'On the communication of suicidal ideas: some sociological and behavioural considerations', *Archives of General Psychiatry*, 3, 160.

Other studies have revealed the possibility that large families may actually formulate suicidal desires.[8] The findings of these studies show that numbers of dependents do not necessarily decrease or inhibit suicidal tendencies. Suicidal behaviour in families can often be the result of 'hostile familial interactions'. For example, family members who directed more aggression and hostility toward the suicidal patient than was returned by that person was evidenced in spouse versus suicidal spouse, children versus suicidal parent as well as parents versus suicidal children.

The clinical evidence shows that the strain of caring for young children may also be a contributing factor to suicidal behaviour. For the very young parents who would have to make adjustments to their own early career building; for the middle-aged or older married persons who take on rather than divest themselves of increased responsibilities, has its own set of stress and upheaval. The ages of children and parents, therefore, can be important factors in suicide. Other studies have found relationships between physical and emotional ill health and the number of children.[9] The evidence of clinical studies mentioned above indicates a more complex relationship between the presence of children and the 'coefficient of preservation' as suggested by Durkheim. The evidence, however, does not categorically refute his contention either.

One of the few studies which found an absence of the inverse correlation between married status and suicide has been reported by Rico-Velasco and Mynko. Their study was conducted in Ohio between 1960 and 1970 and found that the suicide rate for married women was almost double that of single women. They explain their findings by suggesting that the relationship between marital status and suicide is changing because of the changing meaning of various marital statuses in America. For example, socially the stigma attached to singlehood and divorced status has significantly

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8 Maris, R.W. 1975, 'Sociology', in *Handbook for the Study of Suicide*, ed. S. Perlin, Oxford University Press, New York; Rudestain, K.E. 1972, 'Demographic factors in suicide in Sweden and the United States', *International Journal of Social Psychiatry*, 10.

9 Richman, J. & Rosenbaum, M. 1970, 'A clinical study of the role of hostility and death wish in family and society in suicidal attempts', *Israel Annals of Psychiatry*, 8, 3; Jacobson & Portuges, op. cit.; Lieberman, J.A., 'A case for the small family', *Population Reference Bulletin*, April; Bernard, J. 1973, *The Future of Marriage*, Bantam Books, New York; Blood, R. & Wolfe, D.N, 1960, *Husbands and Wives*, The Free Press, New York.

declined. This socio-cultural change in turn has affected the expected patterns of relationship between marital status and the suicide rate.[10]

In another study, Wasserman reminds us that the highly selective presentation of Durkheim's nineteenth century European data did not control for other relevant factors such as the average family size in the various geographical areas. In his analysis, Wasserman links suicide, unemployment and separation/divorce. He argues Stack's findings are flawed because they make individual-level inferences from aggregated data where aggregate level interpretations of findings only could be considered valid.

Wasserman uses multi-variate time-series model controls for seasonal effects, autocorrelation and lagged effect. His findings suggest that as the kinship system is altered, the change decreases the regulation of the individual ego and increases the predisposition toward suicide.[11]

He also points to the economic and community ramifications of divorce - that is, changes in family incomes and shifts in social interactional patterns, as well as divorce itself being a legal process. As divorce influences the structural form of the kinship system and interactional patterns within that system, Wasserman supports Durkheim's contention that the division of labour and suicide was 'influenced by some underlying dimension that was changing at the same time as they were being altered'.[12] He concludes that a similar situation is operating to explain the concomitant interrelation of divorce and suicide in contemporary American society.[13]

Wasserman considered suicide, divorce and immigration levels among the states to be highly intercorrelated but calls for structural-level dynamic models (such as dynamic macro social indicator models) to be developed for future studies.

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10 Rico-Velasco, J. & Mynko, L. 1973, 'Suicide and marital status: a changing relationship', *Journal of Marriage and the Family*, 239-244.

11 Wasserman, Ira M. 1984, 'A longitudinal analysis of the linkages between suicide, unemployment and marital dissolution', *Journal of Marriage and the Family*, 46, 853-9.

12 ibid., p. 858.

13 ibid., p.

Perhaps the most systematic and conceptually sophisticated sociological study aimed at testing Durkheim's theory of social integration and suicide has been conducted by Gibbs and Martin.[14]

Given that Durkheim's hypothesis is related to the strength of an individual's ties with society, Gibbs and Martin have attempted to reformulate his conclusion into an empirically testable proposition by utilizing observable conditions that reflect stable and durable social relationships. They postulate that: the suicide rate of a population varies inversely with the degree of status integration in that population; status integration refers to such factors as the marital status and occupational or age correlates of a particular group. It also refers to the degree of integration of individual possibilities with the particular status which they occupy.

Gibbs and Martin claim that, because people occupy various social status and social roles simultaneously, it is quite likely that some people will encounter a conflict of roles of various status. Role or status configuration leading to conflict will result either in individuals changing their status configurations to other less conflictual combinations or by possibly committing suicide. They then proceed to establish two hypothetical status occupancy scales which include such indices as marital status, race, occupation, age, status of male, religion, and parental status, in an attempt to describe their theory. The crucial assumption made by Gibbs and Martin is that infrequently occupied status configurations, which may be highlighted by their theory, are presumed to be those in which significant role conflict and weak social relations occur. The occupants of such configurations are likely to have a high suicide rate.

Gibbs and Martin state their postulates and the theorem as follows:

POSTULATE 1: The suicide rate of a population varies inversely with the stability and durability of social relationships within that population.

POSTULATE 2: The stability and durability of social relationships within a population vary directly with the extent to which individuals in that population conform to the

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14 Gibbs, J.P. & Martin, W.T. 1964, *Status Integration and Suicide*, University of Oregon Press, Eugene.

patterned and socially sanctioned demands and expectations placed upon them by others.

POSTULATE 3: The extent to which individuals in a population conform to patterned and socially sanctioned demands and expectations placed upon them by others varies inversely with the extent to which individuals in the population are confronted with role conflicts.

POSTULATE 4: The extent to which individuals in a population are confronted with role conflicts varies directly with the extent to which individuals occupy incompatible status in that population.

POSTULATE 5: The extent to which individuals occupy incompatible status in a population varies inversely with the degree of status integration in that population.

THEOREM: The suicide rate of a population varies inversely with the degree of status integration in that population. The results of their empirical test supports their theory and consequently Durkheim's theory of social integration and suicide.[15]

Marital Status and Suicide in Australia

The most reliable data to analyze the possible nexus between the 'family society' and suicide available in Australia relates to age and marital status of suicide victims. The other forms of data about family size, age of children and family stress is either not available or is so sketchy that it is difficult to use it for any meaningful and systematic analysis. The analysis that follows is, therefore, limited to the relationship between marital status and suicide and follows the general conceptualization of the problem as formulated by Gibbs and Martin in their conceptual model outlined above.

The time series data by age and marital status for Australia presented in Table 8.1 largely supports the findings of the studies which show an inverse correlation between 'domestic integration' and suicide. It reveals that in Australia marriage provides the best protection against suicide. In all age groups for men and women suicide rates are lower for married persons. The data also show that for all 15 year and

15 ibid.

older married men and women the suicide rate between 1966 and 1981 has declined. This would suggest that although marriage continues to provide the best protection against suicide in Australia, changing meanings and mores about singlehood, widowhood and being divorced appear to be affecting the suicide rate within these categories of marital status positively.

The data in Table 8.1 together with similar data for 1986 was subjected to log-linear analysis in order to ascertain the magnitude of differences in the suicide rates for different marital status in different age groups. The results of this analysis are presented in Table 8.2 below. Firstly, this analysis confirms the earlier observation that at aggregate level married persons have the lower suicide rates compared with those never married, widowed or divorced. This holds for men and women (see data for all ages in Table 8.2). In other words, being married appears to provide protection against suicide.

However, within various age groups the situation becomes more complex. For men between the ages of 15 and 45 the pattern is consistent with Gibbs and Martin's operational hypothesis of Durkheim's status integration theory that suicide rates vary inversely with the degree of status integration when status integration is measured by the distribution of marital status by age groups in the population at large. After the age of 45 the pattern changes and shows a decline in the suicide rates of the widowed, but still the rates for the divorced remain considerably higher than either married or single males. This pattern could be due to several factors: firstly that status integration tends to be affected by other external factors in older age groups, secondly the numbers of cases may be influencing the statistical values, and thirdly the changing social meanings of various marital status in contemporary Australian society may be a factor in producing this pattern as suggested by Rico-Velasco and Mynko in their study discussed earlier.[16]

16 Rico-Velasco and Mynko, op. cit.

Table 8.1

Suicide Rate at Ages 15 Years and Over Classified by Sex, Marital Status and Age Group: Census Years 1966, 1971, 1976 and 1981

Census Year	Age at Death (years)	Males					Females				
		Never Married	Married	Widowed	Divorced	Total (a)	Never Married	Married	Widowed	Divorced	Total (a)
1966	15-24	9	7	-	-	9	6	7	12	123	6
	25-29	35	10	0	139	18	34	9	-	39	12
	30-34	37	16	243	36	20	35	12	-	105	14
	35-39	65	16	62	151	25	29	16	18	89	18
	40-44	64	23	153	110	30	19	15	19	109	17
	45-64	70	26	74	73	34	24	18	32	37	21
	65 and over	69	30	63	78	41	16	9	19	31	15
	Total 15 and over	24	21	70	86	25	11	14	23	59	15
1971	15-24	16	12	623	-	16	7	5	-	49	6
	25-29	41	12	-	25	20	25	8	52	58	11
	30-34	52	14	-	120	22	44	11	-	96	15
	35-39	55	20	233	71	26	45	10	-	72	13
	40-44	57	20	60	26	25	17	15	27	35	16
	45-64	67	25	70	102	32	25	14	29	49	18
	65 and over	58	25	58	52	36	11	11	13	-	12
	Total 15 and over	28	20	65	78	25	11	11	19	48	13
1976	15-24	17	10	-	-	16	5	3	-	17	4
	25-29	39	13	347	29	21	11	3	48	13	4
	30-34	57	15	-	90	22	25	6	30	12	8
	35-39	62	17	-	118	24	15	4	18	20	6
	40-44	73	17	254	29	25	13	8	32	15	9
	45-64	48	19	73	61	25	24	11	20	28	14
	65 and over	34	24	58	32	31	7	6	9	9	8
	Total 15 and over	26	17	66	60	22	8	7	13	19	8
1981	15-24	18	9	-	-	19	4	4	-	48	5
	25-29	34	13	-	64	24	16	3	-	11	6
	30-34	49	15	-	40	22	20	4	25	8	6
	35-39	48	15	143	55	21	15	6	-	31	8
	40-44	41	23	137	55	27	23	6	21	33	9
	45-64	20	36	64	25	27	8	14	23	10	10
	65 and over	56	21	42	62	29	3	7	8	21	8
	Total 15 and over	26	18	43	57	23	8	6	10	22	7

Source: Australian Bureau of Statistics, Suicide in Australia, Canberra, Cat.No. 3309.D. Table 14.

The pattern for women is again different from men. In the age groups between 15 and 29 the pattern is consistent with Gibbs and Martin's model. After the age of 30 the pattern becomes complex. The pattern for singles aged 30 to 64 follows the hypothesized pattern but for married in the same age groups it deviates. Married women in these age groups tend to be at higher risk than the widowed and divorced. And for those aged 65 and over being married puts them at highest risk compared with the other marital status. The divergence from the pattern postulated by Gibbs and Martin, Durkheim and others among older women may also be due to the factors which have already been noted earlier for men.

Table 8.2

Log-Linear Analysis of Male-Female Suicide Rates in Australia 1966-1986

Age	Marital Status			
	Never Married	Married	Widowed	Divorced
		MALES		
15-24	0.7810	1.1777	2.2603	0.1801
25-29	1.1568	0.8905	1.3490	1.9869
30-34	1.2827	0.8601	0.9155	1.9554
35-39	1.1708	0.8846	1.2390	2.1925
40-44	1.0809	0.9496	0.9974	1.3391
45-64	1.0032	1.0018	0.5495	1.6741
65+	0.9781	1.0281	0.4374	1.5484
All Ages	**1.6626**	**0.7239**	**3.7625**	**1.2678**
		FEMALES		
15-24	0.6854	0.9910	1.8704	1.9663
25-29	0.3958	0.7994	1.8569	0.8083
30-34	1.6387	0.8612	0.8765	0.8488
35-39	1.4800	1.0378	0.3509	1.1786
40-44	1.1077	0.9920	0.8830	0.8705
45-64	1.0137	1.0452	0.8190	0.7731
65+	0.7616	1.1842	0.7566	0.6969
All Ages	**1.3805**	**0.7596**	**1.7683**	**2.8417**

It may be that due to women's emancipation the meanings of marital status among women are changing more rapidly than men due to their economic and social independence. This consequently may affect the pattern of suicide by marital status. Also, as women enter the labour market after finishing child bearing by the age of 35 or become single parents, two trends which are now commonly visible in Australia, they are placed under greater stress due to multiplicity of the social roles they come to occupy and this may increase the probability of role-conflict or role-tension, especially for women with children. This again could be an additional compounding factor in female suicide.

Among older women (65 and over) the sources of stress probably shift from family/labour market induced stress to stress caused by a sick partner whom they have to look after constantly. All these are interesting hypotheses which require closer examination to test their validity than is possible here. For the present they should be treated as no more than some probable causes for the changes in suicide patterns among younger and older women in various marital status.

Another aspect of the nexus between marital status and suicide examined related to the effect of migration and length of residence in Australia on the relationship between the two variables. These data refer to South Australia only and cover the period between 1964-82. Table 8.3 provides an overview of the suicide rate for men and women by marital status and length of residence in Australia.

The evidence shows that married men tend to have the lowest suicide rate. The suicide rate among never married males tends to be relatively stable around 19 per 100,000 population. Among the married it declines with the period of residence. This suggests that married migrants face larger psycho-social pressures in the early years of their settlement but as they stay longer and children gradually grow up they feel more settled, and these pressures decline which are then reflected in lower suicide rates.

Among the divorced and widowed, suicide generally declines with the period of residence, once again supporting the hypothesis that years of residence is inversely related to the suicide rate. Among men, widowers have the highest suicide rate at

various stages of the period of residence. The higher suicide rates among divorced and widowed would suggest that loss of 'family society' creates a more stressful circumstance among migrants than those who are either married or have never been married.

Table 8.3
South Australia: Suicide Rates by Sex, Marital Status, Length of Residence: 1964-82
Rate (100,000)

Length of Residence	Never Married	Married	Widowed	Divorced
MALES				
0-4 years	18.4	29.6	-	107.0
5-9 years	19.9	28.4	29.2	581.4
10+ years	19.1	14.9	20.3	79.2
Total	**19.1**	**17.2**	**21.8**	**89.4**
FEMALES				
0-4 years	18.7	14.1	34.6	34.3
5-9 years	5.1	13.7	21.6	23.2
10+ years	4.9	8.5	13.6	15.9
Total	**5.0**	**9.3**	**15.0**	**16.3**

Source: Australian Bureau of Statistics, Adelaide (special data runs).

The most interesting aspect of female rates reported in Table 8.3 is that although suicide rates generally decline among all groups with length of residence, the overall rate for never married persons is lowest. Marriage provides some protection against suicide in the early years of settlement and continues to do so compared with divorced and widowed women with length of residence but it is the never married women who not only experience a quicker decline but also have the lowest overall suicide rates. The statistics reported in the table are for a smaller population and suicide cases and therefore needs to be interpreted with some caution and requires further analysis based on a longer period of time.

An attempt was made to ascertain the role of children in suicidal behaviour. As noted earlier, the data about the existence of children among the suicide population presents analytical and methodological problems. As much of the primary data in this

study was extracted from the State Coroner's files of suicide cases, it is often difficult to ascertain the presence of children in many cases as this information, if not relevant to the Court's determination whether the person had suicided, is usually not mentioned in the account of the court proceedings. Methodologically, it is therefore difficult to obtain reliable data about the precise family circumstances of the suicide cases. Analytically, even when the information about children is available, it is difficult to isolate their role in suicidal behaviour. At best, what can be done is to determine the domestic circumstances of the individuals at the time of their suicide as this information can be pieced together from the police reports on the investigation and from the persons who are called by the court as witnesses.

A detailed analysis of all cases of suicide committed in South Australia in 1982 was undertaken to construct the domestic arrangements of the suicide population at the time of their death. This information is presented in Table 8.4 below.

Table 8.4

Domestic Circumstance of Suicide Cases in South Australia 1982

Domestic Circumstance	**N**	**%**
Ego only	48	29
Ego + spouse/partner	44	27
Ego + young children	2	1
Ego + spouse/partner & young children	15	9
Ego + parents (all adults)	18	11
Ego + friends/shared accommodation (all adults)	10	6
Institutional care	9	5
Not known	20	12
Total	**166**	**100**

Ego = suicide victim
Source: State Coroner of South Australia, Court Files 1982.

The evidence shows that in only 10 percent of the cases was there direct evidence of the presence of children. Most of the suicides were committed by people who were either living alone or with other adults at the time of their death. This data appears to be

consistent with the findings of the studies on this subject which have been examined above.

In conclusion, the empirical evidence from Australia supports the general thrust of Durkheim's hypothesis that 'coefficient of preservation' is much higher among married persons. This general pattern largely holds for younger men and women but among older persons the pattern becomes more complex. It has been argued that some of the complexity in the patterns or changes in the profile of suicide rates for various marital status may in part be due to the changing status of men and women in society and also due to the changing meaning of various marital statuses which tend to compound the patterns of relationship between marital status, social integration and suicide rates. This is an area which requires further analysis and closer scrutiny before we can establish the reasons for this change.

CHAPTER 9

MIGRATION, NATIONAL ORIGIN AND SUICIDE

There is now a considerable body of evidence which indicates that the incidence of suicide is higher among migrant groups. This chapter will review some of this evidence and also present evidence which has been collected as part of this study. It will also explore the variations in suicidal behaviour among migrant populations in Australia.

Immigration to a new country or community invariably involves disruption of established social ties, thus adversely affecting the degree of social and community integration for the immigrant. The disruption of social ties and its effect on the degree of social integration produces a state of 'anomie' which according to Durkheim's aetiology is one of the principle causes of suicide. In general, the existing sociological studies of the problem tend to support this hypothesis.

In one of the first systematic studies of the problem, Ruth Cavan, a University of Chicago sociologist, found that immigrant suicide in New York City, Chicago, Philadelphia and Boston far exceeded that of the native born Americans. She also discovered that the rates for immigrants were significantly higher than the rates of their native countries.[1] Similar trends have been noted among the immigrant groups in the United States and elsewhere in the nineteenth century.[2]

In a comparative study of 34 nations marked by high voluntary immigration, Stack[3] discovered that even after controlling for two other relevant factors (women in the labour force and percentage of population 65 years and over) the results of his multiple regression analysis confirmed the immigration-suicide link - the greater the rate of immigration the greater the suicide rate. In a similar study designed to test a

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1 Cavan, Ruth S. 1928, *Suicide*, University of Chicago Press, Chicago.

2 Kushner, Howard I. 1984, 'Immigrant suicide in the United States: toward a psycho-social history', *Journal of Social History*, 18, pp. 3-24; Sainsbury, P. & Barraclough, B. 1968, 'Differences between suicide rates', *Nature*, December 21; Hassan, R. 1983, *A Way of Dying: Suicide in Singapore*, Oxford University Press, Kuala Lumpur.

3 Stack, S. 1981, 'Comparative analysis of immigration and suicide', *Psychological Reports*, 49, pp. 509-510.

hypothesis derived from Durkheim's work, that high rates of immigration and population increase are likely to characterize geographical areas with a low level of social integration and based on the migration trends in various states of the United States and the District of Columbia, suicide rates were significantly related to the rates of population increase and immigration.[4] In another important study of in-migration in New Orleans, Breed[5] discovered a more complex relationship between suicide, migration and race but most significantly there was a significant link between suicide and period of residence in the city for white females.

In Australia the link between suicide and migration has been investigated in a number of studies conducted primarily by psychiatrists since the 1950s. Perhaps the most focused study has been reported by Whitlock.[6] According to Whitlock, between 1965-1967 the suicide rates for overseas born were significantly higher than Australian born. The rates per 100,000 were 16.1 and 10.0 for Australian men and women respectively, and 27.7 and 15.0 for migrant men and women. His evidence also showed that the suicide rates among migrant men remain significantly higher than Australian born in various age groups. Among migrant women aged 15 to 44 years the suicide rates were slightly lower than Australian born women but among 45 to 64 and 65 years and over migrant women the rates were significantly higher than Australian born (see Table 9.1). A number of studies have revealed similar general patterns as described above.[7] Other studies have examined some possible methodological reasons which may contribute in part to the difference between migrant and Australian born suicide rates.[8]

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4 Boor, Myron 1981, 'Relationship of 1977 state suicide rates to population increases and immigration', *Psychological Reports*, 49, pp. 856-858.

5 Breed, Warren 1966, 'Suicide, migration and race: a study of cases in New Orleans', *Journal of Social Issues*, 22, pp. 30-43.

6 Whitlock, F.A. 1971, 'Migration and suicide', *Medical Journal of Australia*, 2, pp. 840-848.

7 Burvill, P.W., McCall, M.G., Stenhouse, N.S. & Reid, T.A. 1973, 'Deaths from suicide, motor vehicle accidents and all forms of violent deaths among migrants in Australia, 1962-66', *Acta Psychiatr. Scand*, 49, pp. 28-30; Burvill, P.W., Armstrong, B.K. & Carlson, D.J. 1983, 'Attempted suicide and immigration in Perth, Western Australia, 1969-1978, *Acta Psychiatr. Scand*, 68, pp. 89-99.

8 Burvill, P.W., McCall, M.G., Stenhouse, N.S. & Woodings, T.L. 1982, 'The relationship between suicide, undetermined deaths and accidental deaths in Australian born and migrants in Australia', *Australian and New Zealand Journal of Psychiatry*, 16, pp. 179-184; Burvill, P.W., McCall, M.G., Woodings, T. & Stenhouse, N.S. 1983, 'Comparison of suicide rates and methods in English, Scots and Irish migrants in Australia', *Social Sciences and Medicine*, 17, pp. 705-708.

Table 9.1
Suicide Rate per 100,000 Persons for Australian born and Immigrants - Australia 1965-67

Age	Suicide Rate Males	Females
15-44 years		
Australian	18.9	11.9
Immigrant	23.6	10.4
45-64 years		
Australian	32.1	20.8
Immigrant	40.4	29.1
65 and over		
Australian	38.5	14.7
Immigrant	47.5	22.1

Source: Whitlock, op. cit.

As part of this study, the difference between migrant and Australian born suicide rates was also examined. This examination was however, limited to suicides committed in South Australia between 1964 and 1982. The findings are reported in Table 9.2 below and confirm findings of earlier studies by Whitlock and Burvill et al. mentioned above. The evidence shows that the aggregate suicide rates for overseas born men and women are significantly higher than their Australian born counterparts. The pattern of age specific suicide rates shows that the rates among Australian and overseas born increase with age. The rates among migrants increase much more rapidly as they age. This pattern holds for overseas born men and women.

There are two somewhat competing explanations for the differences in overseas born and Australian born suicide rates. Sociological explanations tend to attribute the differences to the disruption of established social ties which may in turn adversely affect their degree of social and community integration and produce a state of 'anomie' which, in the general theory of suicide aetiology expounded by Durkheim, is one of the principal causes of suicidal behaviour. Another factor which may further contribute to the underlying social conditions of high suicide among migrants is that most of them on arrival settle in major cities which may further accentuate their sense of anomie.

Table 9.2
South Australia: Age, Sex, Period of Residence, Birthplace - Specific Suicide Rates 1964-1982
Rate (100,000)

	AUSTRALIAN-BORN	OVERSEAS-BORN Period of Residence		
		0-9 Years	10 Years & Over	Total
MALES				
15-24 years	15.0	22.3	27.6	19.1
25-44 years	20.2	21.3	28.6	20.0
45-64 years	26.6	24.9	35.0	23.9
65 years and over	28.7	42.3	71.5	43.1
Total	**14.4**	**17.6**	**34.2**	**20.7**
FEMALES				
15-24 years	3.8	5.7	8.5	4.6
25-44 years	9.9	6.1	14.2	7.6
45-64 years	12.3	27.1	25.9	16.6
65 years and over	8.0	17.1	24.3	13.4
Total	**6.1**	**7.5**	**18.1**	**9.3**

Source: Registrar of Births, Deaths and Marriages, South Australia, for Suicides 1964-1982. Rates were computed using 1976 Census population data for various categories.

The other explanation much more favoured by psychiatrists is that suicide results from individual psychological dysfunction and mental illness. Migrants tend to experience both of these conditions more so than Australian born and this increases the propensity to suicidal behaviour among them.

These explanations at best are ex-post facto explanations and probably are applicable to varying degrees to various immigrant groups depending on their pre-immigration and post-immigration circumstances. Whitlock, in his analysis of the differences between migrant and non-migrant suicide rates in Australia states this very succinctly:

> The difference ... can best be explained by reference to the influence of mental illness, the premigration mental health and the degree of social support and integration enjoyed by the different immigrant groups following their arrival in Australia, and as a corollary of the last aspect of this issue, the amount of isolation endured, the family support enjoyed and the impact of the whole migration experience on the single male settler.[9]

9 Whitlock, op. cit., p. 845.

The abovementioned explanations, however, have one serious limitation. They do not explain the major differences in the suicide rates among the migrant groups who belong to different nationalities. The observed difference between migrant and non-migrant suicide rates may be a function of higher suicide rates among some migrant groups than others. It therefore requires further analysis which is undertaken in the following section.

National Origin and Suicide

Public interest in the problem of suicidal behaviour among different ethnic groups has been much more pronounced in the United States than in Australia. Consequently, the problem has been discussed in greater detail and subjected to systematic study. In 1861, for example, the New York Times reported that there had been an 'extraordinary increase of suicidal mania' in New York City which was then experiencing one of the greatest inflows of immigrants in its history. The Times attributed this in part 'to the great German and Irish emigration'. Reviewing the statistics, The New York Times concluded that 'of the whole number of suicides one quarter were Germans, another quarter Irish, a third quarter were natives of the United States and the remaining fourth credited to various other European nations'.[10] This meant that whereas only one quarter of the population of New York was overseas born it accounted for three quarters of all suicides.

In the study referred to earlier American sociologist Cavan discovered that from the 1880s to the 1920s 'German immigrants in the United States had the highest suicide rates; Scandinavian - with the exception of Norwegian - Austrian, and English come next; the Irish and Russian groups follow, while the Italian immigrants have almost as low a rate as native-born Americans'.[11] And as Kushner points out, 'what is most

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10 'Suicide in New York City 1860', *The New York Times*, January 17, 1861 as cited in Kushner, op. cit., p. 10.

11 Cavan, op. cit., pp. 34-35.

surprising is that even today the incidence of suicide among European ethnic groups in America continues to reflect the patterns first noted in the mid-nineteenth century'.[12]

That suicide rates vary greatly among ethnic groups in Australia as in the United States and elsewhere has been now well documented in sociological and psychiatric studies.[13] Table 9.3 below provides suicide rates for males and females from selected countries in the United States and Australia. Making allowances for the difference in the years to which these data relate it is interesting to note that countries with high suicide rates in Australia (Germany, Poland, Czechoslovakia, Austria, USSR) are also the countries with similarly high suicide rates in the United States. Three countries included in the table, however, show very different patterns. Suicide rates of migrants from England and Wales are significantly lower in Australia than in the United States.

Table 9.3
Suicide Among Immigrants from Selected Countries in the USA and Australia

	USA (1959)			Australia (1968-80)		
	Male	Female	Persons	Male	Female	Persons
England and Wales	33.7	9.1	19.2	19.5	7.8	13.7
Ireland	17.9	4.4	9.8	25.4	9.6	17.9
Germany	44.4	11.4	25.7	37.3	16.2	26.7
Poland	39.3	11.7	25.2	42.8	21.3	33.0
Czechoslovakia	56.2	10.6	31.5	44.0	32.9	39.5
Austria	57.8	11.4	32.5	47.3	32.3	40.6
USSR	47.0	14.4	30.2	45.1	22.0	33.0
Italy	29.7	5.4	18.2	12.7	4.6	7.9

Source: The U.S. data is from Denys de Catanzaro 1981, *Suicide and Self Damaging Behaviour*, reproduced in Howard I. Kushner, op. cit., p. 13; the Australian data are from the special Australian Bureau of Statistics tabulations for the study.

It is the opposite of the Irish immigrants who have higher rates in Australia and interestingly the Italian immigrants tend to have significantly higher suicide rates in the United States than in Australia, but primarily due to a significantly higher suicide among the male Italian immigrants. Female Italian immigrants tend to have relatively low and

12 Kushner, op. cit., p. 14.

13 See Whitlock, op. cit.; Hassan, R. 1981, 'Suicide in Singapore', *European Journal of Sociology*; Hassan, R. 1983, op. cit.; Cavan, op. cit.; Burvill, P.W. et al. 1973, op. cit.

similar suicide rates in both countries. This evidence, though limited to only a selected number of countries, would lend some support to Whitlock's contention that 'suicide is a culture bound phenomenon'.[14]

However, to ascertain the validity of Whitlock's observation we would need to compare the suicide rates of immigrant groups with the rates of their respective native countries. Table 9.4, besides achieving this ovjective, also disaggregates the suicide rates of selected countries for which it was possible to obtain data from the Australian Bureau of Statistics, by period of residence in Australia.

The data show that with the exception of the United States and New Zealand, immigrants from all other countries mentioned in the table tend to have significantly higher suicide rates in Australia than the rates in their respective native countries. The rate for American and New Zealand immigrants tend to be slightly lower in Australia than in their respective native countries. These statistics need to be interpreted with caution because of the small numbers of suicides for some countries which could distort the rates (for raw data see Appendix A). The pattern described above tends to generally hold for male and female immigrants.

The immigrant groups from countries with relatively high suicide rates generally tend to have very high suicide rates in the first nine years after their arrival in Australia. This is especially so in the case of immigrants from Austria, Hungary, Czechoslovakia, Federal Republic of Germany, Italy and Yugoslavia whose rates tend to be two to four times higher in the early years of settlement in Australia compared with the rates prevailing in their countries of origin. This general pattern also applies to migrants from countries with low suicide rates, England and Wales, Scotland, Ireland, Greece, India and Malta. The main difference between these countries and the countries with very high suicide rates mentioned earlier is the magnitude of difference, although the general pattern is similar, i.e. immigrants tend to have higher rates compared with the rates for their native countries.

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14 Whitlock, op. cit., p. 843.

Table 9.4
Migrant vs Native Suicide Rates in Australia
(according to length of residence)

	0-9 Years in Australia				10+ Years in Australia				All Years in Australia				Native Rate			
	M	F	P	M/F Ratio	M	F	P	M/F Ratio	M	F	P	M/F Ratio	M	F	P	M/F Ratio
England & Wales	21.7	8.8	15.0	(2.5:1)	17.1	7.2	12.2	(2.4:1)	19.5	7.8	13.7	(2.5:1)	10.7	6.5	8.5	(1.6:1)
Scotland	21.7	12.9	17.4	(1.7:1)	22.3	9.4	15.9	(2.4:1)	23.6	10.5	17.1	(2.2:1)	11.8	7.6	9.6	(1.6:1)
Ireland	24.9	10.3	17.5	(2.4:1)	21.9	8.3	15.6	(2.6:1)	25.4	9.6	17.9	(2.6:1)	6.1	3.3	4.7	(1.8:1)
Austria/Hungary	90.4	31.7	62.4	(2.9:1)	39.8	30.3	35.6	(1.3:1)	47.3	32.3	40.6	(1.5:1)	53.1	21.6	36.7	(2.5:1)
Czechoslovakia	103.6	79.6	92.5	(1.3:1)	26.7	25.1	26.1	(1.1:1)	44.0	32.9	39.5	(1.3:1)	30.1	10.1	19.8	(3.0:1)
Germany (Fed. Rep.)	70.9	26.4	48.7	(2.7:1)	28.5	14.0	21.2	(2.0:1)	37.3	16.2	26.7	(2.3:1)	29.0	14.6	21.5	(2.0:1)
Greece	17.9	10.0	13.7	(1.8:1)	5.7	2.7	4.2	(2.1:1)	7.5	3.7	5.6	(2.0:1)	4.0	1.9	2.9	(2.1:1)
India	19.7	10.5	15.0	(1.9:1)	15.4	7.0	11.1	(2.2:1)	17.7	8.6	13.6	(1.6:1)				
Italy	42.4	9.1	25.8	(4.7:1)	10.7	4.6	7.9	(2.3:1)	12.9	4.8	9.2	(2.7:1)	8.0	3.5	5.7	(2.3:1)
Malta	15.0	0.0	7.4		7.6	3.5	5.7	(2.2:1)	8.3	2.9	5.8	(2.9:1)	3.7	0.6	2.1	(6.2:1)
USSR	9.0	16.0	12.0	(0.6:1)	52.0	24.0	38.0	(2.2:1)	45.1	22.0	33.0	(2.0:1)	-	-	-	-
Poland	15.4	10.3	12.5	(1.5:1)	41.1	22.5	32.9	(1.8:1)	42.8	21.3	33.0	(2.0:1)	21.7	4.0	12.6	(5.4:1)
Yugoslavia	61.7	20.3	39.0	(3.0:1)	16.1	5.0	11.3	(3.2:1)	25.6	8.3	17.7	(3.1:1)	19.2	8.8	13.9	(2.2:1)
USA	15.4	6.6	11.0	(2.3:1)	11.8	7.9	10.0	(1.5:1)	15.1	7.5	11.4	(2.0:1)	18.8	6.3	12.4	(3.0:1)
New Zealand	8.8	3.8	6.3	(2.3:1)	14.2	10.8	12.5	(1.3:1)	12.0	6.3	9.2	(1.9:1)	13.6	5.7	9.6	(2.4:1)

Sources: Australian Bureau of Statistics, Canberra (special data runs).

Notes: (1) Rates are for all ages.

(2) USSR suicide rate is not available and therefore migrants from USSR are excluded from the discussion. The suicide pattern of USSR migrants, however tend to be similar to the Polish pattern.

(3) M = Male; F = Female; P = Persons.

The general trend as regards to the effect of the length of residence on the suicide rates is that suicide rates decline with the length of residence except in the case of immigrants from Poland and USSR. Their rates behave in the opposite way and increase significantly with the length of residence. What is remarkable is that the increase occurs in the rates of males and females. This pattern also applies to immigrants from New Zealand but their rates are comparably lower than those of Polish and Russian settlers.

What general points can be distilled from these statistics? Firstly, in general, immigrants tend to have higher suicide rates in Australia than in their native countries; secondly, in general, migrants from English speaking countries tend to have lower suicide rates in early years of settlement than those of non-English speaking countries; thirdly, the rates for immigrants from non-English speaking countries tend to decline, as in the case of immigrants from English speaking countries, with the period of residence in Australia but their rates generally remain higher; fourthly, Polish and USSR immigrants experience a dramatic increase in their suicide rates as they stay longer in Australia and finally, the male/female suicide ratio among immigrants from Austria, Hungary, Czechoslovakia, Malta, Poland, the United States of America and New Zealand tend to decline compared with the corresponding ratio in their country of origin.

What are some of the plausible explanations for these trends? Firstly, it should be mentioned that the differences in the suicide rates of different groups of immigrants in Australia revealed by the data in Table 9.4 are broadly consistent with the findings reported by Whitlock.[15] Sociological factors which can explain these differences would include the degree of social support and integration experienced by the different immigrant groups following their arrival in Australia, and, as a consequence of this the amount of isolation endured, the family support enjoyed and the impact of the whole migration experience on single male or female settlers. The relevant psychological factors which may play a role in explaining the differences would include mental illness

15 Whitlock, op. cit.

and the pre-migration mental health of the immigrants.[16] The latter can be ascertained from the prevalence of affective disorders, alcoholism and personality disorders. Any clear trends in the distribution of these conditions among various immigrant groups would indicate a possible link between mental illness and suicidal behaviour.

Analysis of hospital admissions for mental illness reported by Krupinski et al. provides some lead in the prevalence of mental disorders among various immigrant groups.[17] An analysis of these data reveals that in terms of percentage distribution there was no difference between English speaking immigrants and Australian born persons but that there were major differences among European immigrant groups. Schizophrenia was found to be a very common diagnosis among all immigrants of both sexes except for those from Great Britain, Ireland and New Zealand.[18] In contrast to this the diagnosis of alcoholism was found to be considerably less among all European born males except those from Poland, who together with male immigrants from Great Britain, Ireland and New Zealand, had the condition diagnosed with a frequency corresponding with that occurring among Australian born males. The evidence also showed that the rates for alcoholism among immigrants from England and Wales and New Zealand were considerably higher than those prevalent in their home countries.

Whitlock, after examining the hospital admissions data reported by Krupinski et al., has concluded that:

> From these variations in the frequency of mental illness, one might deduce that among English speaking males alcoholism is one of the principal contributors to raised suicide rates, as it may be for Polish men. To what extent the heavy drinking among these groups of settlers is due to acculturation and imitation of heavy drinking among Australian born males, or how far it is due to premigration personality disorder and intemperance, cannot be decided. There is strong evidence in support of the view that young single, male immigrants are a self-selected group, among whom will be found a considerable number with psychological

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16 ibid.

17 Krupinski, J. & Stoller, A. 1965, 'Incidence of mental disorders in Victoria, Australia, according to country of birth', *Medical Journal of Australia*, 2, p. 265; Krupinski, J., Scharchter, F. & Cadd, J. 1965, 'Factors influencing the incidence of mental disorder among migrants', *Medical Journal of Australia*, 2, p. 269.

18 Whitlock, op. cit. has commented on these findings and raised the issue about the role of language barriers and difficulties in producing these differences. There is, of course, no way to know this but it is a factor which needs to be taken into account in explaining the elevated rates of schizophrenia among non-English speaking European migrants.

problems that might well proceed to alcoholic addiction and suicide in some instances.[19]

Krupinski et al.,[20] in their analysis, closely examine the effects of demography and social and cultural attitudes on hospital admission rates for mental illness. They conclude that irrespective of the direct effect of mental illness on suicide rates, the impact of the migration experience and the degree of social isolation or support encountered by newcomers will have major bearing on the production of suicidal behaviour. Social isolation may be a major factor in misuse of alcohol. According to Krupinski et al. the proportion of alcoholics admitted to hospital who lived alone was higher than for any other diagnostic category and that the admission rates for alcoholics rose with increasing length of stay in Australia and age.[21]

This would indicate the role of acculturation process in the immigrant settlement experience. The English speaking immigrants would find the acculturation to Australian mores easier whereas it would be different in the case of non-English speaking migrants. This may explain at least partly the high prevalence of alcoholism among the English speaking settlers, and low alcoholism rate among Greek, Italian and Maltese settlers. The last three groups, besides not being affected by the heavier drinking habits of the larger Australian community, may also be following the customs and traditions of their home countries.

The other social factors which may have bearing on the differential suicide rates among the immigrant groups relate to family cohesion and sponsorship of the immigrants. Southern European immigrants tend to display more family cohesion than settlers from other regions. They also tend to sponsor and presumably care for new settlers from their own countries to a degree greater than that shown by other nationalities.[22]

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19 Whitlock, op. cit., p. 646.
20 Krupinski, et al., op. cit.
21 ibid.
22 Stoller, A. 1966, *New Faces*, Cheshire, Melbourne; Storer, D. (ed.) 1983, *Ethnic Family Values in Australia*, Prentice Hall, Melbourne.

The suicide rates of Polish and Russian immigrants in Australia as pointed out earlier, increase dramatically with increasing period of residence. It is difficult to attribute this to lack of family cohesion as they are known to be similar in this respect to the Southern European settlers. The most likely explanation which can be constructed from impressionistic evidence is that they face severe economic hardships after their arrival and to a high incidence of alcoholism which may in part be a consequence of the economic hardship they experience.

These explanations at best only partly explain the differential suicide rates among immigrant groups in Australia. Incidence of mental illness, pre-migration mental health, availability of social and community support and the rate of acculturation all create both the psychological and sociological circumstances which may be conducive to elevating suicide rates among them to varying degrees. We must wait for more systematic studies to find out how different psycho-social circumstances impact on suicidal behaviour and what are the external and internal conditions which may contribute to either increasing or depressing suicidal propensities among different immigrant groups. Another question which needs attention in this respect is that why do some individuals who belong to high suicide risk immigrant groups commit suicide while others in the same groups who experience the same circumstances do not suicide. An attempt to explain this phenomenon has been put forth by Hendin and others.[23] It has been labelled as 'object-loss' theory.

This theory postulates that suicide is most prevalent among those who have experienced a severe 'object-loss' especially the death of a parent or sibling during childhood. Any perceived loss such as a divorce, desertion, loss of face, identity or self respect can also be classified as an object loss. Some cultures provide ritualized behaviour such as mourning to express object-loss, others do not and consequently produce depression as the individuals are unable to express their loss and release their grief. This can also lead to depressive actions such as risk-taking and even attempted

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23 Hendin, H. 1964, *Suicide in Scandinavia*, New York; Freud, Sigmund 1949, *Mourning and Melancholia*, Collected Papers, vol 4, Hogarth Press, London; for additional references on this issue see Kushner, op. cit.

suicide which is a sort of ritual attempt to avoid suicide. The absence or presence of ritualized ways of coping or not coping with object-loss influences the formation of a psycho-social character of communities and societies.

The connection between object-loss theory and migrant behaviour is constructed in the following way. Migrants are both deserting and deserted. Migration itself may be a strategy of risk-taking pursued by some who feel particularly self-destructive. Migrants tend to be people in search of self-transformation. To the extent that such change is either restricted or impossible, the guilt for having rejected past values and rituals intensifies as the dream of self-transformation fades. The fantasies of self-transformation always carry with them a burden of self-rejection and to a certain extent, a level of self-hate.[24]

Those who migrate to a greater or lesser extent create a modified object-loss. This loss results not only from the material fact that others have been left behind but also because ritual structures which enable them to deal with loss sometimes also have been abandoned or cannot be re-established. It is, therefore, not migration per se that leads to suicide but rather that those migrants who lack ritual and social support face a high risk of suicide. This theory obviously needs to be tested with relevant empirical data before we can ascertain its advantage over the existing sociological and psychiatric theories which at least partially explain the differences in immigrant suicide rates in Australia and elsewhere. It is, however, interesting that at the macro conceptual level one can see the applicability of this theory to the patterns of suicide reported in Table 9.4.

The rates of English speaking immigrants tend to move closer to the Australian norm as the period of residence increases and presumably they are assimilated in the ritualized ways of coping with object-loss because of the cultural similarities between their home countries and Australia. The Southern European migrants experience a greater sense of object-loss in the initial years but as they are incorporated and assimilated in the sizable and distinct Southern European communities in Australian

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24 Kushner, op. cit.; Becher, Ernest 1973, *The Denial of Death*, New York; Erikson, Erik H. 1968, *Identity Youth and Crisis*, New York.

cities their suicide rates decline dramatically with increasing period of residence. The East and West European immigrants tend to have very high suicide rates on arrival but their rates remain comparably high because unlike the Southern Europeans most of them are forced to assimilate into the Australian social cultural patterns as they do not have the large spatial concentrations of their compatriots in Australia which are socially and culturally as meaningful as they are in the case of Southern Europeans. The persistence of a high suicide rate can thus be attributed to a lack of success in their attempts to assimilate in the receiving community and as a consequence, overcome the object-loss.

A similar experience may explain the unusual suicide pattern of Russian and Polish immigrants except that in their case their lack of success in assimilating in the host community may also accentuate psycho-social problems including depression due to lack of access to the cultural rituals to express loss of their identity and being and consequently inability to cope with it successfully which then may accentuate and/or contribute to the propensity towards self-destructive behaviour among them. The preceding discussion is not intended to claim or demonstrate the validity of the object-loss theory but it does indicate its appropriateness for further application in understanding and explaining the different rates of suicide among immigrant groups in Australia together with the other sociological and psychological theories.

A Note on Self-Destructive Behaviour Among Australian Aboriginals

Australian Aboriginals are not immigrants but immigration of non-Aboriginal people since 1788 has brought about profound changes in their society, culture and identity. They have become 'strangers' in their own country within a short span of 200 years. Before the arrival of European settlers they were divided into distinct tribal groups. They had simple material cultures but a complex kinship system which contained the organizational principles of their tribal societies.

The arrival of European settlers changed all that and it is no exaggeration that their cultures, societies and identities have been subjected to wholesale devaluation and

physically they have been subjected to some of the worst excesses of colonialism. From people who had no history of self-destructive behaviour they have become, as usually happens to victims of social and cultural denigrations, prone to a very high level of self-destructive behaviour. There are some sketchy studies of this problem[25] but perhaps the most comprehensive study of self-destructive behaviour has been conducted by the Aboriginal Education Foundation of South Australia in collaboration with the Flinders University of South Australia. It seems appropriate that some of the main findings should be mentioned in this chapter.

One of the grim lessons social scientists have learned from the history of colonialism is that to destroy a society we do not need to kill all its members. The destruction can be achieved through the devaluation of their society's social and cultural institutions through which social life is regulated, reproduced and sustained. This devaluation of social institutions produces anomie, hopelessness, despair and depression which condemns its members to a gradual and slow social death. This phenomenon has been vividly documented in the case of Australian Aborigines by Colin Tatz in a sombre and thoughtful paper.[26] Similar reports have appeared about other indigenous groups such as the American Indians.[27] What follows builds on the mood of pessimism described by Tatz. Except that in the study referred to earlier their pessimism was captured through an investigation of their social health including the incidence of self-destructive behaviour among urban Aboriginals residing in metropolitan Adelaide.

The study was based on data collected from a random sample of 88 heads of households. Most of them (4 in 5) were care-givers, living in government rented housing. A very high proportion were female (81%) and one in two were supporting mothers. Most had been in Adelaide for over ten years. The average household size

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25 For a summary of these studies see Radford, A.J., Harris, R.D., Brice, G.A., van der Byl, M., Monten, H., Matters, D., Nesson, M., Bryan, L. & Hassan, R. 1990, *Taking Control: A Joint Study of Aboriginal Social Health in Adelaide with particular reference to Stress and Destructive Behaviour 1988-89*, Department of Primary Health Care, Flinders University, Adelaide.

26 Tatz, Colin 1989, 'Aborigines: a return to pessimism', unpublished paper, Department of Politics, Macquarie University, Sydney; also see Butlin N.G., 'Close Encounters of the Worst Kind: Modelling Aboriginal Depopulation and Resource Competition 1788-1850', *Working Papers in Economic History*, Australian National University, Canberra.

27 See for example Berlin, Irving N. 1987, 'Suicide among American Indian adolescents: an overview', *Suicide and Life-Threatening Behavior*, 17, 3.

sexually abused and 51 percent had been victims of physical violence either in childhood or as adults, often more than once. Most had foster home or institutional experience and one in two had left school earlier than they wished they had. Two in three were receiving public benefits or pensions to support themselves. Only about 50 percent had telephones and a motor vehicle. One in six had 'no close friend'. Most of the male respondents had been in trouble with the law over the past two years. In short, the profile of the respondents was that of a group which was socially and economically severely disadvantaged, with a high level of stress induced by their present economic, medical and social conditions.[28]

Among the information collected from the respondents was information about self-destructive behaviour. Before the subject of 'suicide attempt' was raised during interviews the respondents were asked 'on occasions when angry or down in the dumps have you ever physically hurt yourself?' For some respondents, this constituted behaviour which they regarded as an attempt to end their lives. For others this was not the case, as fewer respondents reported attempts to 'end their lives' than did 'hurt themselves'. Twenty five (28%) reported they had 'hurt' themselves, and most of them were women. For those who had 'hurt themselves' but did not later declare having taken action 'to end their lives', such self-hurting behaviour could be considered as para suicidal behaviour. The respondents were then asked about suicidal behaviour. The data about suicidal behaviour reflects the respondent's own interpretation of their behaviour.

Twenty seven or 31 percent of the respondents had made at least one 'serious attempt' to end their lives and seven had done so more than once - all of whom were females. Most attempters were less than 26 years of age at the time of their first attempt. Violent abuse, death of a close relative, family interference, loss of control, depression, rejection in relationships were some of the major events mentioned by the respondents which they regarded as having precipitated their first suicide attempt. The attempters were heavily dependent (93%) on pensions or benefits compared with 62

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28 For further details of their background see Radford, et al., op. cit.

percent who were non-attempters. Besides financial reasons, violent abuse, health problems which were found to be associated with those who had attempted suicide, four factors of personal perception which included non-acceptance by the rest of society, major stresses associated with minor violation of the law, frequent feelings of anger, and feeling that the person was not in reasonable control over his/her life were also found to be significantly associated with suicide attempts. Six percent of the respondents knew that a partner or former partner had attempted suicide and another six percent identified at least one immediate family member who had died through suicide.

The picture which emerges from the preceding description is that the Aboriginal community in Adelaide is economically deprived and dependent on state benefits or pensions, socially isolated, feels rejected by society at large and feels angry and hopeless about its economic and social circumstances. The individual members feel that they are subjected to police harassment unnecessarily, many have experienced sexual and physical abuse and are highly prone to self-destructive behaviour. These findings clearly suggest the need for public policies aimed at strengthening the institutional framework which would enable Aboriginal Australians to experience and enjoy the benefits of full citizenship.[29]

29 The preceding account is based on the contents of a report by Radford et al., op. cit. Readers should consult this report for a fuller detail of Aboriginal social health problems in contemporary Australian society.

CHAPTER 10

ETIOLOGY OF SUICIDE

This chapter will review some of the main theoretical classifications of etiology of suicide which have been advanced by sociologists. In this respect it is an extension of the ideas already discussed in Chapter 1. This review will be followed by an analysis of the precipitating events which were found to be associated with suicidal behaviour in Australia.

Etiological Classifications

At least three major typologies of etiology of suicide have been advanced by sociologists. The first and probably the best known was offered by Durkheim who viewed suicide resulting from strength and weakness of society's control over the individual. He posited four basic types namely, altruistic, egoistic, anomic and fatalistic, each postulating a specific type of individual-society relationship.

Altruistic suicide was a result of excessive integration of the individual with his or her society and 'insufficient individualism'. This type of suicide occurs when the individual has so completely identified with the society or group that its goals and its identity becomes his or hers and consequently the individual has no autonomous existence separate from his or her group or society. The group holds such 'massive cohesion' that each member is willing to sacrifice his or her life for the sake of the honour or survival of the group. Durkheim thought that altruistic suicide occurred more frequently in relatively small societies and in rigidly organized groups or organizations such as the army.

Egoistic suicide was a result of inadequate integration of the individual resulting from very weak and tenuous ties with the society. As a consequence, the individual had to rely on his or her own resources and rules of conduct founded on private interests all of which result in 'excessive individualism',

presence of which produced propensities towards self-destructive behaviour under certain circumstances.

Anomic suicide was a result of inadequate regulation or a sudden and unexpected change in a person's social or economic position creating a new situation with which the individual was unable to cope. Thus both anomic and egoistic suicide were marked by society's insufficient presence in the individual. One involved a lack of 'meaning' in genuinely collective activity and the other left individual's passion without a curb to regulate them.

The fourth type of suicide was called fatalistic and it resulted from excessive regulation of the individual, where the individual had no personal freedom, no hope and where 'passions were violently suppressed' by oppressive discipline.

Egoism-altruism and anomie-fatalism were two sides of the 'social-bond'. Durkheim used his typology to distinguish distinct 'suicidogenic currents' affecting different groups and classes in society and corresponding to the states of the different social environments as a function of which suicide varies.[1]

The second major typology has been advanced by Edwin Shneidman. It consists of three types: egotic, dyadic and ageneratic. Egotic suicides are those in which death is the result of an intra-psychic debate, disputation, struggle or dialogue within one's self. The individual is overwhelmed by this intra-psychic conflict and debate and consequently becomes alienated from his/her immediate social environment and surroundings. This conflict eventually leads to the destruction of the 'self' of the personality of the ego.

Dyadic suicides are those in which the death relates primarily to the deep unfulfilled needs and wishes pertaining to the significant others. These type of suicides are primarily social in their nature as they stem essentially from interpersonal events - frustration, hate, anger, disappointment, shame, rate, guilt, impotence and rejection.

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1 Durkheim, op. cit., pp. 145-277; Lukes, op. cit., p. 207.

Ageneratic suicides are those in which self-destructive behaviour relates primarily to the individual's 'falling out' of the 'procession of generations'. As a result, the individual loses his/her sense of belonging and becomes a lonely, isolated person and is overwhelmed by a sense of alienation and estrangement from his familial, cultural, national and group ties.[2]

The third typology has been propounded by Jean Baechler. According to Baechler, there are four types of suicidal acts, namely Escapist, Aggressive, Oblative and Ludic. An escapist suicide is one of flight or escape from an intolerable situation by the subject. This can be due to a combination of emotions such as shame, guilt, worthlessness or due to the loss of an important element in an individual's personality or way of life. He further divides this type of suicide into two sub-types, namely flight and grief.

Aggressive suicides are suicides which involve crime (involving another in one's death), vengeance (to create remorse or opprobrium), blackmail and appeal(to inform one's friend and family that the subject is in danger). Oblative suicides involve sacrifice or transfigurations and relate to higher values or infinitely desired states. Examples of this type of suicide are Japanese Seppuku (which has been described in Chapter 1) and the self-immolation for example of Buddhist monks during the Vietnam War. His fourth type is called Ludic suicide. It involves proving oneself through the 'ordeal' or the 'game'.

According to Baechler all these suicides are rational solutions to particular situations and existential problems. Essentially his typology highlights the personality of the person as the focal point in the analysis of suicidal behaviour. Certain personalities through a lifelong solution process tend to gravitate towards particular positions which sociologists identify as having high suicide rates.[3]

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2 Shneidman, E. 1968, 'Classifications of suicidal phenomena', *Bulletin of Suicidology*, 1-9 and also his *Definitions of Suicide*, John Wiley & Sons, New York, 1985.

3 Baechler, Jean 1979, *Suicides*, trans. Barry Cooper, Basic Books, New York.

The above typologies are useful in so far as they identify social factors and conditions which produce varying degrees of suicide rates in different societies. They mainly focus on the sociogenic factors in suicidal currents in society and generally do not explicitly deal with the role of possible biogenic and psychogenic factors. These typologies and especially the best known of them by Durkheim have been used to analyze suicide rates and how and why they tend to vary over time and across different countries. This point has already been documented by this study as well. The preceding chapters have demonstrated and discussed the significant relationship between suicide rates and the social factors over the past century in Australia.

However, none of these typologies are very useful in analyzing the individual cases and the specific circumstances leading the individual to commit suicide. Part of the objective of this chapter is to focus on the individual cases of suicides committed in Australia and to identify and classify their specific circumstances. In this respect, this section is different from the other parts of this study, all of which have focused on the social factors and not on the individual.

A Classification of Individual Cases by the Immediate Circumstances of Suicide

The specific questions to be explored in this section are: What are the circumstances surrounding individual suicides in Australia? Are there any common circumstances which surround suicidal behaviour in Australia? The exploration of individual circumstances is indeed a very different task than the one traditionally assumed by sociologists. However, when one is dealing with suicidal individuals or with cases of those who have suicided it is inevitable that one is forced to ask these and similar questions. They emerge in real life clinical situations and/or in research investigations based on the analysis of individual suicide cases.

Currently a study is being conducted under the joint sponsorship of the American Medical Association and American Psychiatric Associations of 110 physicians' deaths by suicide and 110 matched non-suicidal physicians' deaths. The key questions asked through an extensive questionnaire require the respondents to classify the suicides in one or more of the following categories:

1. rational (to escape pain etc.)
2. reaction (following loss)
3. vengeful (to punish someone else)
4. manipulative (to thwart others' plans)
5. psychotic (to fulfil a delusion)
6. accidental (reconsidered too late)

All of the above categories have been very specifically designed to classify circumstances surrounding the individual suicide.[4] Some years ago while analyzing 794 cases of suicide in Singapore I attempted to isolate circumstances which appeared to be crucial in the lives of the individuals just before they suicided. Such information was available in about only half of the cases. In conducting this research I was conscious of the complexity and subjectivities of the process.

The coroners, who often identify possible circumstances and cause(s) of the suicide act in their inquests, merely operate within their respective socio-cultural framework which embodies social, psychological and sometimes metaphysical notions which can be applied to explain an individual act or acts of suicide within the society. No doubt they do have 'objective' evidence provided by the police and medical reports and evidence of relatives, friends and colleagues, but they still have to interpret the evidence and this is where the identification of possible causes becomes complex and subjective.[5]

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4 cited in Shneidman, op. cit., pp. 28-29.

5 For a detailed description of this see Hassan, *A Way of Dying*, op. cit. Chapter 5; a very useful analysis of the role of the coroners in suicide in Australia is provided by the State Coroners of Victoria. See Hal Hallenstein, 'Suicide - the coroner as catalyst', a paper

In the Singapore study, after a detailed and careful examination of about 400 cases of suicide for which the relevant information was available in the coroner's court files, I was able to develop the following categories of circumstances involved in individual suicides: (1) physical illness; (2) mental illness; (3) loneliness; (4) poverty (including financial problems); (5) family problems; (6) failure in life; (7) unhappy love; (8) shame and guilt; (9) unsatisfactory work life; (10) change in environment; and (11) citizenship problems.[6] These categories were then applied to rank their importance in individual suicidal behaviour in Singapore.

A similar exercise was conducted as part of this study and 179 suicide case files in the South Australian Coroner's Court were examined. Most of these suicides were committed in 1982 but there were a few cases which had occurred in 1981. In about 80 per cent of the cases examined there was information which was considered crucial or critical by the coroners in causing or triggering the suicide act. In 45 cases there were suicide notes which provided valuable insights and information about the circumstances and probable 'causes' of suicide as perceived by the deceased. Following the methodology applied in the Singapore study and after a careful and detailed examination of all the cases the following categories were constructed: (1) physical illness; (2) mental illness; (3) physical and mental illness; (4) unhappy love; (5) family/marital problems; (6) shame and guilt; (7) grief and burden (on others); (8) drug and alcohol abuse; (9) financial and unemployment problems; (10) a sense of failure in life; and (11) loneliness. A brief description of these categories follows.

Physical Illness

This category refers to both bodily pain and disease and is most usually associated with those aged over 60. Most of the cases involved were male. Pain and discomfort were the two most common reasons given, although not wishing

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presented at the conference on Preventing Youth Suicide, held in Adelaide, 24-26 July 1990 under the auspices of the Australian Institute of Criminology, Canberra.

6 See Hassan, R., *A Way of Dying*, op. cit.

to be a burden on others may also be present. Occasionally the suicide occurred in the context of a close friend or relative having died of the same disease as that diagnosed in the suicide victim. Cancer was the most frequently cited disease, although pain from accidents was also not uncommon. Although not associated with mental illness, depression was often present as a result of the pain and discomfort, the wish to 'not live as a vegetable' was often expressed. The suicide act was usually well planned and executed.

Mental Illness

This category refers to mental illnesses which have been clinically diagnosed and may or may not have been institutionalized. They range from schizophrenia, paranoid schizophrenia, obsessive personality through to manic depressive psychosis, homicidal delusions and actual murder. Many cases in this category were being treated by an institution or doctor for mental health 'problems' ranging from previous suicide attempts to depression. It was distributed across all age groups but people most at risk were those who had suffered from chronic mental illness over a period of several years and which had seriously impaired the individual's ability to engage in normal social activities.

Physical/Mental Illness

This category refers to an association between physical and mental illness, resulting possibly from brain damage as a result of an accident or stroke. The combination of physical and mental illness was generally associated with elderly males suffering from declining physical and mental health including senility.

Unhappy Love

This category includes a wide range of circumstances of unhappy love which usually involved other problems as well such as conflict at work, unemployment, conflict with the law. It was usually characterised by the other person leaving, or about to leave and extends from friendship through engagement to short term de-facto relationships. The split is most characteristically the culmination of a series of crises in a time of uncertainty.

Occasionally there was a history of unhappy love, most commonly a divorce followed by a de-facto relationship which tends to end abruptly. Unhappy love, in these instances, may have been associated with a dependence during a time of need. Rarely was it caused by an enforced split. In some cases it was complicated by homosexuality. Most people falling into this category tend to be young men and women in their twenties or thirties.

Family/Marital Problems

While family conflict was the most common characteristic of this etiological category, the exact nature of the conflict was seldom recorded in the coroner's case files. In a general sense, family problems were often related to high alcoholic consumption, violence, deterioration of mental and physical health, marital or family breakdown, and isolation within the family. In some instances, conflict was rooted in a power struggle within the family. Most cases usually had a history of long discord with other family members which had remained unresolved.

Shame and Guilt

In some cases this category refers to an inability to meet obligations or social expectations, but overwhelmingly it is associated with a sense of disgrace. It was largely associated with suicides of middle aged men and older females. It was more prevalent in cases where there had been either a perceived sexual demeanour or grave social embarrassment. It was also associated frequently with imprisonment.

Grief and Burden on Others

This category refers to instances in which the deceased expressed a wish not to be a burden on others. It was generally associated with advancing years and sickness. Some of the evidence suggests that being a burden was more illusory than real. It is possible, however, that in giving a statement, relatives and friends camouflaged their guilt feelings by emphasizing that the deceased had not been a burden on them. Possibly the deceased may have been influenced by

changing social values concerning the role of the family and the increased emphasis on independence and individualism. It also included cases suffering from a sense of burden on others with grief emanating from multiple sources. The category was not gender specific although somewhat more females than males were involved.

Drug and Alcohol Abuse

It refers to excessive and frequently addictive abuse of drugs or alcohol. It involved persons (mostly men) who were young or middle aged. The abuse occurs usually in secret and generally involved individuals who had inadequate housing and incomes and were often residing in a single person household. Most of the deaths occurred from excessive substance abuse.

Financial and Unemployment Problems

The cases in this category were usually characterized by an inability to cope with the burden of financial problems arising from unemployment and lack of financial resources to meet personal needs and social obligations. There was extreme worry over financial difficulties, either imagined or real. It usually involved a sense of dependency, hopelessness and pessimism about the present and the future. Although it was not gender specific, there was an over-representation of men in their twenties and thirties and older men. In some older people financial problems tended to be accompanied by shame and embarrassment.

A Sense of Failure in Life

The cases in this category usually involved a long history of a number of interlocking things going 'wrong'. It was associated with a sense of failure and of 'giving up' on life. A combination of loss of employment, ill health, accident, indebtedness, loss of face, failure to meet family obligations and alcoholism contributing to a downward spiral leading to suicide. The category is neither age nor gender specific but was often associated with marital breakdown and failure

in business or profession. This category also involved the sudden concurrence of a number of events which together contributed to the decision to end one's life. Such incidents usually occurred over a short period of time and typically involved adolescents living at home with their parents. Being spurned by a lover, resorting to alcohol, being involved in an accident or a court appearance were some of the miscellany of factors which were also present in several of the cases.

Loneliness

Loneliness refers to the lack of meaningful social contacts, the feeling of forlornness, rootlessness and a sense of isolation. It also includes the tendency to lead a solitary life and to feelings of depression, boredom and emptiness resulting in a failure to become involved in social life. Generally, it involved older men and younger men affected by death, separation or divorce.

These categories were applied to classify 176 suicides most of which had occurred in 1982. An attempt was made to classify each case according to the aforementioned classifications. In some cases it was extremely difficult to categorize a case because of the presence of more than one factor. In such cases a decision was made by the author about the primacy of a factor. It was impossible to classify 39 cases because of the lack of relevant information in the Coroner's Court files. The results of this exercise are reported in Table 10.1 below.

The data in the table indicate that the most common factors were a sense of failure in life; family and marital problems, mental illness, unhappy love, and physical illness. The data were further analyzed to ascertain the distribution of various factors in male and female suicides. It revealed that the six major factors in female suicide were: unhappy love, a sense of failure in life, family problems, grief and burden, feelings of shame and guilt, and physical illness. For men the principal factors were: sense of failure in life, family problems, physical illness, mental illness, loneliness, and financial/unemployment problems.

Table 10.1
Immediate Circumstances or Factors Affecting Suicide in South Australia

Circumstance/Factor	Numbers
Physical illness	12
Mental illness	16
Physical and mental illness	9
Unhappy love	14
A sense of failure in life	25
Family/marital problems	23
Shame and guilt	9
Grief and burden on others	9
Drugs and alcohol abuse	5
Financial/unemployment problems	9
Loneliness	6
Not known/insufficient information to classify	39
Total cases	**176**

Source: South Australian Coroner's Court files.

The classification described above was also used to analyze all suicides committed in 1982. The purpose of this analysis was to ascertain the relative primacy of various factors in suicidal behaviour in various age groups as well as among men and women. The results of this analysis are presented in Table 10.2 below. In this table various factors are ranked in terms of their importance from high to low for women and men in various age groups.

As the data in Table 10.2 reveal, unhappy love is the major cause of suicide among young women aged 29 and under, and ranks second after failure in life for their male counterparts. The evidence suggests that social relationships are a major form of concern for young Australians for whom success has a social and more specifically romantic gauge.

Table 10.2
Main 'Causes' of Suicide in Australia by Sex and Age

Rank of Suicide Cause	29 Years & Less	30-44 Years	45-59 Years	60-69 Years	70 Years & above
			Female		
1	Unhappy love	Failure in life	Failure in life/ Family problems/ Grief and burden	Shame and guilt	Physical illness/ Failure in life/ Grief & burden
2	Failure in life/ Family problems/ Grief & burden	Unhappy love/ Family problems	Physical-Mental illness/Financial-unemployment problems	Physical-Mental illness/Grief-burden	-
3	-	Drug-Alcohol abuse	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
			Male		
1	Failure in life	Failure in life	Family Problems	Physical illness/ Physical-Mental illness/Family problems	Physical illness/ Loneliness
2	Unhappy love/ Mental illness	Mental illness/ Financial-unemployment problems	Failure in life/ Shame-Guilt	Failure in life/ Grief-burden	Physical-Mental illness
3	Family problems/ Shame & Guilt	Unhappy love/ Family problems	Financial-unemployment problems Physical-Mental illness	-	Failure in life Family problems/ Grief & burden
4	Drug-Alcohol abuse Financial-unemployment problems	Shame-Guilt/ Drug-Alcohol abuse/ Loneliness	Unhappy love/ Physical illness/ Mental illness/ Loneliness	-	-
5	Grief-burden/ Loneliness	-	-	-	-

The major reason for suiciding among men aged 44 years and below and among women aged 30-44 years is a 'sense of failure'. This despair about life can be a combination of perceived and actual fears associated with health, lifestyle, unemployment and marital status. Men seem disposed to feel a failure at an earlier age than women, probably because traditionally they have had prescribed roles which are easier to assess in terms of success and failure (e.g. income, job performance).

The other major factor in female suicide in the age group are family/marital problems and unhappy love. On the other hand, in the case of men, financial problems and unemployment appear to be the most important. For both sexes mental illness ranks second. Drug and alcohol abuse play an equally important role for men and women, but in the case of men, loneliness, shame and guilt also appear as important factors.

A sense of failure and family/marital problems remain significant factors associated with suicidal behaviour among men and women aged 45-59 years. Unemployment/financial problems and physical and mental illness affect both sexes.

Physical health and mental wellbeing become increasingly problematic with advancing years. Thus for men aged 60-69 years physical/mental illness adds to family/marital problems to form the primary causes of suicide. For women in this cohort physical/mental illness are secondary causes, and shame and guilt are the primary reasons. Grief and burdening others are ranked second in importance for both sexes and this is congruent with the loss of family and friends, and the increased dependence of old age.

Physical illness is commonly given as a reason for suicide for both men and women 70 years and over. Loneliness is an added factor for men, and failure in life, grief and burdening others for women. Problems like unhappy love and unemployment characteristic of younger age-groups are not significant causes of suicide among the elderly. Interestingly, failure in life remains an important

cause of suicide (first and third in women and men respectively), and appears an enduring reason for Australian men and women of almost any age to end their lives. As noted previously, different theatres of life are affected by different circumstances. Youth suicide is pre-occupied by relational, emotional and financial-instrumental factors. Aged suicide on the other hand are occupied by the problem of ill-health and inability to maintain social bonds due to loneliness, and failure in life.

A Note on Two High Risk Groups

Prisoners

In Australia, the prison population tends to have an extremely high suicide rate. This is consistent with the international pattern.[7] According to a study reported by Hatty and Walker from the Australian Institute of Criminology, over one third of deaths in Australian prisons are due to suicide. The suicide rate between 1980 and 1985 among prisoners was 120 per 100,00 prison population. This rate was about eleven times higher than the suicide rate for Australia and seven times higher than the suicide rate for Australian males of all ages.[8] The data also reveal that about 50 percent of all deaths in prison occur as a result of suicide. Between 1980 and 1985 a total of 155 deaths occurred in prison of which 77 were suicide.

Most of the suicides in prison (80%) are committed by persons aged 15 to 34 and a large majority of them (67%) are 20 to 29 years of age. Hanging and overdose are the main methods of suicide. The other socio-demographic attributes of prison suicide are that they tend to be unmarried and Australian born.

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7 Hatty, Suzanne, E. & Walker, John R. 1986, *Deaths in Australian Prisons*, Australian Institute of Criminology, Canberra; Biles, David 1990, *International Review of Deaths in Custody*, Research Paper no. 15, The Royal Commission into Aboriginal Deaths in Custody, Canberra.

8 Hatty & Walker, op. cit., Table 1.

Suicide risk tends to be highest among remandees and people waiting to be sentenced. Among the prisoners who have been formally sentenced the suicide risk is highest in the first few months. According to Hatty and Walker's study there is a very strong tendency for prisoners remanded in custody on homicide charges to commit suicide prior to conviction.[9]

Two main theoretical perspectives have been used in sociological analysis and explanation of high incidences of suicide in prisons. These perspectives are referred to as 'The Importation Theory' and 'The Deprivation Theory'. The Importation Theory is based on the premise that suicide in custody can be explained by variables similar to those used to understand suicide in the wider society.. In other words, factors such as ethnicity, age, marital status and degree of social integration are regarded by the proponents of this theory as superior explanatory variables linked to inmate suicide, rather than the prison experience itself.[10]

The Deprivation Theory posits that the structure of prisons and the experience of incarceration act as the suicide trigger. This may particularly be so during key junctures of incarceration such as reception, removal to solitary confinement or impending release.[11] The Australian data, though sketchy, provides a partial support for the Deprivation Theory perspective.[12]

Chronic and Life-Threatening Illnesses and Suicide

A number of studies of suicide in recent years have reported that persons with chronic and life-threatening illnesses such as cancer, Huntington's disease and renal failure etc. tend to have significantly higher suicide rates than that of

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9 Hatty and Walker, op. cit., Table 14.

10 Irwin, J. 1970, *The Felon*, Prentice-Hall, Englewood Cliffs; Anson, R.H. and Cole, J.N. 1984, 'Inmate suicide: ethnic adaptations to the prisonization experience', *Justice Quarterly*, 1, 4, 563-7.

11 Clemmer, D. 1938, *The Prison Community*, Christopher; Reasons, C.E. and Bray, B., 'Organizational violence against prisoners: prison suicides in Canada', cited in Hatty and Walker, op. cit.

12 Hatty and Walker, op. cit.

the general population.[13] Mentally ill people have also been found to have an elevated suicide rate compared with the general population.[14] Some recent studies have suggested that the acquired immunodeficiency syndrome (AIDS) is also associated with a range of psychiatric illnesses such as depression, paranoia, psychoses, dementia, delirium as well as suicide.[15] Much of the evidence about AIDS and suicide until recently has been anecdotal.

AIDS and Suicide

A study by Marzuk et al.[16] in New York City has systematically examined the question whether individuals with AIDS die by suicide more often than others their age. The authors compared lists for the calendar year 1985 of New York City residents with AIDS (N=3828) and NYC residents who died of suicide (N=668). A total of 12 NYC residents with AIDS who suicided during 1985 (0.3% of all male AIDS patients) were men between the ages of 20 and 59. The suicide rate for NYC men between the ages of 20 and 59 was 19 per 100,000 men. The 1985 suicide rate for NYC men between the ages of 20 and 59 with AIDS was estimated to be 681 per 100,000 men or 36 times higher than the general population rate.

According to this study, all the AIDS related suicides were committed within nine months of when the AIDS diagnosis was first made and most were committed within six months. On autopsy, none of the victims appeared to have wasted, suggesting that all were at relatively early stages of the illness. One-third

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13 Abram, H.S., Moore, G.L. & Westervelt, F.B. 1971, 'Suicidal behaviour in chronic dialysis patients', *American Journal of Psychiatry*, 127, 119-124; Haenel, T.H., Bunner, F. & Battegay, R. 1980, 'Renal dialysis and suicide: occurrence in Switzerland and in Europe', *Comparative Psychiatry*, 21, 140-145.

14 Black, D.W., Warrack, G. & Winokur, G. 1985, 'The Iowa record linkage study: excess mortality among patients with functional disorders', *Arch. Gen Psychiatry*, 42, 82-88.

15 See Davis and Schrueder 1990, op. cit.

16 Marzuk, P.M., Tierney, H., Tardiff, K., Gross, E.M., Morgan, E.B., Hau, M. & Mann, J.J. 1988, 'Increased risk of suicide in persons with AIDS', *Journal of the American Medical Association*, 259, 1333-1337.

of the AIDS related suicides had made prior suicide attempts and two-thirds were under psychiatric treatment of some kind at the time of their suicide.

Australian Situation

There are no systematic and published studies of AIDS and suicide in Australia at present. The following account is an attempt to piece together the existing scant information from published and unpublished sources. According to available data in 1988 there were about 5,000 HIV positive patients in Australia. Five of them, all males, were reported to have died by suicide. This means that in 1988 the suicide rate for persons with HIV infection was 100 per 100,000 persons which was about six times the rate for males in the general population in that year. If we apply the New York City study's suicide proneness rate to the Australian situation then in 1988 about 17 HIV positive persons would have been expected to have committed suicide. I am not suggesting that we should apply the NYC figures without further systematic research work, but in the absence of reliable data it does provide an instructive yardstick to examine the Australian situation and to speculate about the extent to which suicides committed by HIV positive patients were concealed in Australia in 1988.

It was also possible to gather reasonably reliable information from one major public health facility involved in the diagnosis and treatment of HIV infection in South Australia and from one major privately managed clinic involved in the same activity. According to the records of the public clinic, in 1988 there were 290 HIV positive persons in South Australia of whom 34 had full blown AIDS. Eighteen of them died due to their illness in 1988. There were also 12 other deaths among those who were HIV positive, but were not suffering from AIDS in 1988. According to anecdotal evidence reported to the staff, of these 12 deaths 5 or 6 were suicides. Based on this estimate the suicide rate among HIV infected persons in South Australia was 1,724 per 100,000 or about 100 times higher than the rate for men in the general population. However, it is

important to mention that since 1988 there has been a significant decline of reports of suicide among the HIV infected persons seen at the clinic.

According to the information gathered from a private clinic which gave medical and psychiatric care to 80 HIV infected patients, although there has been no suicide among the patients under treatment, there were two deaths among them due to motor vehicle accidents and these were strongly suspected to be suicide. However, the cause of death recorded was motor vehicle accident. According to the Director of this facility there were 2 or 3 para- suicide. One phenomenon most noticeable at this clinic was the very high incidence of psychiatric illness among its patients. Another observation made by the Director was what he called a 'chronic suicide syndrome' among several patients. This syndrome was described as continuous use of narcotics, irresponsible use of alcohol and other recreational drugs and irresponsible sexual behaviour.

The senior staff from both clinics report that in 1988, according to the reports they have received from other patients, there were between 5 to 8 suicides among the HIV infected persons in South Australia. It is worth noting, however, that the coroner's record for 1988 suicide do not identify a single suicide victim as HIV positive which means that all 5 to 8 suspected suicides by HIV infected patients were reported as non-suicides. This concealment was made easier by the fact that HIV infection until recently was not a notifiable disease which enables the doctors to conceal the suicide as death due to 'natural causes'. Another factor in the concealment may be to save the family of the patient, which may have not been aware that the deceased was HIV infected, from the embarrassment and stigma of having the infection.

From the above somewhat sketchy account there appears to be an urgent need to focus on suicide and suicidal behaviour among HIV infected persons in Australia and if we are to embark on large-scale screening for HIV antibody it must be accompanied by skilled professional counselling because of the extremely high suicide risk posed by positive test results. It also seems important

that we promote ways to educate the community about HIV infection in order to reduce the incidents of concealment of suicide by HIV infected persons which if committed through violent means such as motor vehicle accidents or gunshot wounds could place care-givers or other innocent persons at risk of contracting the infection accidentally. Similarly the high incidence of suicide in Australian prisons require new ways of prison and prisoner management to reduce the suicide risk in gaols.

CHAPTER 11

METHODS OF SUICIDE

Studies of methods used to commit suicide have generally revealed that men and women use different methods of suicide.[1] Some studies have investigated the relationship between ethnicity, age, region and method of suicide.[2] One explanation for the differential choice, especially between men and women, is the notion of 'lethality of intent'. This notion contends that men are more intent on committing suicide and consequently choose methods such as firearms which are highly lethal. The other hypothesis disputes validity of the 'lethality of intent' hypothesis and instead focuses on 'differential socialization' as the main explanation for male, female differences in methods of suicide. This hypothesis is embedded in the broader socio-cultural perspective on means of suicide which contends that

> On a general level ... an individual is subject to social and cultural norms that help him define acceptable and nonacceptable forms of behavior, including methods of self-destruction. We would expect that these norms are internalized and, to varying degrees, relatively consistent with other values and beliefs, such as bodily appearance, avoidance of pain, assumed effectiveness of method, and moral and religious convictions. As a consequence of the constellation of values, beliefs, and social pressures the range of alternative methods of self-destruction is considerably narrowed. It is from this range of acceptable methods that one chooses an available method.[3]

In a study designed to test these two hypotheses, Taylor and Wicks[4] report that the data collected from official death certificates in five U.S. cities

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1 Davis, E. 1967, 'The relationship between suicide and attempted suicide: a review of the literature', *Psychiatric Quarterly*, 41, pp. 752-765; Dublin, L. 1963, *Suicide: A Sociological and Statistical Study*, The Ronald Press, New York; Maris, R. 1969, *Social Forces in Urban Suicide*, Dorsey Press, Homewood; Lester, G. and Lester, D. 1971, *Suicide: The Gamble with Death*, Prentice-Hall, New Jersey.

2 Taylor, M.C. and Wicks, J.W. 1980, 'The choice of weapons: a study of methods of suicide by sex, race and region', *Suicide and Life-Threatening Behavior*, 10, pp. 142-150; Hassan, R. 1983, *A Way of Dying*, op. cit; Whitlock, 'Suicide in Australia', op. cit.

3 Marks, A. and Abernathy, T. 1974, 'Towards a sociocultural perspective on means of self-destruction', *Suicide and Life-Threatening Behavior*, 4, pp. 3-17.

4 Taylor and Wicks 1980, op. cit.

over a three year period provide little support for the 'lethality of intent' hypothesis and only a partial support for the 'differential socialization' hypothesis.

Another perspective has focused on convenience and access as significant factors in methods of suicide.[5] For example, people residing in modern cities whose landscape is dominated by tall buildings commit suicide by jumping; small city or village dwellers may commit suicide by hanging themselves from a tree or a high beam in their home. Similarly, age affects accessibility and, therefore, the choice of method. A closer examination suggests, however, that choice of method may, in fact, be related to sociocultural and social structural factors as well.

Some of the most famous structures erected by humans such as the Eiffel Tower, the Empire State Building, the San Francisco Bay Bridge, the Sydney Harbour Bridge and the pagoda in Kew Gardens hold a strong fascination for people prone to suicide. In fact, all these have been called the 'deadliest' architectural structures and the pagoda in Kew Gardens was closed to the public in the early 1900s. The Eiffel Tower, for example, has lured hundreds of victims into committing suicide either off, on or around it. Most have jumped, but a few have also shot or poisoned themselves in its immediate vicinity. The tower authorities over the years have put up special grilles and fences to prevent people from jumping off the Tower, but there are still people determined enough to crawl through ventilators in order to find a suitable jumping platform.

In 1978 over nine hundred followers of the California-based Peoples Temple died during a self-imposed ritual of mass suicide in the small, obscure hamlet of Jonestown in the jungles of Guyana, on the northern coast of South America. According to one observer, it was 'an appalling demonstration of the way in which a charismatic leader can bend the minds of his followers with a

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5 Hassan 1983, op. cit.; Cantor, C. and Lewin, T. 1990, 'Firearms and suicide in Australia', *Australian and New Zealand Journal of Psychiatry*, 24, pp. 500-509; Hetzel, op. cit.

devilish blend of professed altruism and psychological tyranny ...'[6] The Jonestown mass suicide was the largest single instance of mass suicide since the closing years of World War II when hundreds of Japanese civilians leapt to their deaths off the cliffs of Saipan as the American forces approached the pacific island. One relevant fact which needs mentioning is that everyone in Jonestown died by one method - drinking a cyanide solution. Even those who had guns in their possession did not use them to commit suicide. According to two observers in Jonestown at the time, 'two young men ... came to us with rifles at the semi-ready. They were smiling, very happy. We're going to die in revolutionary suicide - with dignity and honour'.[7] Both were black, in their late teens or early twenties, and both died - by drinking cyanide - for what appear to be religious reasons.

There is little evidence that persons committing suicide in Australia use a particular method because it holds a special fascination for them. What we do know, however, from the data presented in Table 11.1 is that about 87 per cent who commit suicide use three methods - self poisoning (which includes poisoning by solid or liquid substances, poisoning by gasses for domestic use, poisoning by other gasses and vapours), hanging (including strangulation and suffocation), and guns.

The evidence also suggests that men use more violent methods than women to suicide. About half the young males (under 25 years) used guns to suicide. The use of guns declines gradually to around 33 per cent amongst men in their sixties and seventies. Amongst men, the use of self poisoning increasing with age. Hanging remains a fairly common method among all men although it tends to be more often used by males under 20 years and over 65 years. Six out of every 10 women use self poisoning to suicide. The use of guns and jumping from tall buildings are more common among younger than older women.

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6 *Time*, December 4, 1978.
7 ibid.

Table 11.1

Suicide Registered in the Combined Years 1968 to 1981: Method Used, Classified by Age Group and Sex

Age at Death (Years)

	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-74	75& Over	Total
						Males							
Poisoning by solid or liquid substances	14.6	19.8	21.5	21.5	23.3	23.2	27.1	25.4	26.8	21.9	20.8	17.0	22.3
Poisoning by gases in domestic use	2.6	2.5	3.6	2.6	3.2	3.7	2.4	2.6	2.8	2.2	3.2	4.7	3.0
Poisoning by other gases and vapours	10.1	14.7	16.1	18.0	18.3	16.3	15.4	13.0	9.9	10.5	6.8	3.8	13.4
Hanging, stragulation and suffocation	19.5	10.4	12.4	11.6	12.1	13.6	13.5	14.5	15.9	15.4	19.2	20.1	14.3
Submersion (drowning)	1.1	1.3	2.0	1.7	1.6	2.5	2.1	2.7	3.9	4.3	5.6	9.3	2.9
Firearms and explosives	45.1	43.9	36.5	33.5	33.9	33.4	31.7	33.6	32.7	34.4	33.7	32.3	35.4
Cutting and piercing instruments	0.2	0.7	1.0	1.5	2.0	1.6	2.4	3.2	2.2	3.3	3.1	5.8	2.1
Jumping from high places	4.0	3.0	3.3	4.4	1.9	2.0	2.2	2.2	2.9	3.6	2.8	3.1	2.9
Other and unspecified means	2.9	3.8	3.6	5.1	3.7	3.8	3.2	2.8	2.9	4.4	4.8	3.9	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	n=925	n=1690	n=1538	n=1374	n=1350	n=1475	n=1548	n=1404	n=1190	n=913	n=1415	n=687	n=15525
						Females							
Poisoning by solid or liquid substances	56.7	57.8	58.7	55.9	59.3	64.4	56.7	61.3	60.6	61.5	55.1	51.2	58.7
Poisoning by gases in domestic use	3.8	4.6	4.2	4.3	4.6	4.6	3.6	3.6	2.9	4.5	5.2	6.0	4.2
Poisoning by other gases and vapours	5.5	5.2	5.3	6.4	7.1	5.4	3.1	2.3	3.5	1.4	1.6	0.7	4.0
Hanging, strangulation and suffocation	7.2	7.0	6.7	6.8	8.8	7.4	10.5	9.4	10.7	9.5	12.0	14.1	9.2
Submersion (drowning)	0.7	2.8	2.1	3.3	4.1	4.6	6.6	9.1	8.7	10.1	14.6	14.5	6.8
Firearms and explosives	11.0	11.2	10.6	12.4	8.5	6.9	7.0	4.3	3.2	3.4	2.4	2.1	6.8
Cutting and piercing instruments	0.3	0.8	1.4	1.9	0.8	0.8	2.7	1.8	3.0	2.0	2.2	1.4	1.7
Jumping from high places	11.0	7.0	5.1	3.9	2.9	3.1	4.4	3.0	2.7	2.6	2.5	3.9	4.0
Other and unspecified means	3.8	3.8	5.8	5.2	3.9	2.8	5.3	5.2	4.6	5.1	4.4	6.0	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	n=291	n=502	n=567	n=517	n=590	n=648	n=772	n=727	n=624	n=506	n=632	n=283	n=6662

(a) includes age not stated

Source: Adapted from Table 13, Australian Bureau of Statistics, Suicide, Australia (1983).

The use of drugs in self poisoning has been found to be associated with liberalization of laws regarding he use of sedatives in recent years. Similar differences in male and female suicide methods have been noted by other Australian researchers.[8] A close reading of their research findings provides a partial support for the socio-cultural perspective mentioned earlier.

There are also some interesting differences in the methods used in various regions of Australia. Men and women from the Northern Territory and Tasmania use guns most often. Men in Western Australia, New South Wales and the Australian Capital Territory (ACT) and women from the ACT and New South Wales, use guns less frequently and self poisoning more frequently than do men and women from other states.[9]

Change and Continuity in Suicide Methods in Australia

There has also been a shift in the methods used to suicide in Australia. Among men the use of firearms to suicide increased gradually until the 1980s. But since then it has been declining. The use of hanging and self-poisoning have also increased steadily among men whereas the other methods have remained either insignificant or relatively stable.

Among women, hanging and carbon monoxide poisoning have increased significantly. The other types of self-poisoning have registered a decline along with drowning, guns and use of cutting and piercing instruments. The general pattern appears to be a noticeable decline in the violent methods of suicide and an increase in the passive methods - self-poisoning and hanging. The reasons for this shift are difficult to identify as we need more data to draw reliable conclusions. But the most plausible explanation is that as suicide risk has shifted

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8 Hassan, R. and Tan, G. 1989, 'Suicide trends in Australia, 1901-1985: an analysis of sex differentials', *Suicide and Life-Threatening Behavior*, 19, 362-380; Hassan, R. and Tan, G. 1992, 'Women's emancipation and suicide in Australia: a replication', *Australian and New Zealand Journal of Sociology*, 28, 1; Hetzel, B.S. 1971, 'The epidemiology of suicide behaviour in Australia', *Australian and New Zealand Journal of Psychiatry*, 5, pp. 156-66. Also see Chapter 4, Gender and Suicide.

9 Australian Bureau of Statistics 1983, *Suicide*, op. cit., p. 14.

among the very young and the aged it has also brought about a shift in the use of violent to passive methods.

Table 11.2
Methods of Suicide in Australia 1910-1990

Method	1910	1930	1950	1977	1981	1990
	Male					
Poisoning by solid or liquid substance	18.3	24.9	17.9	16.2	15.8	12.9
Poisoning by gases in domestic uses	-	6.2	9.3	1.6	1.4	0.1
Poisoning by other vapours and gases	-	-	-	17.0	15.3	22.2
Hanging, strangulation and suffocation	16.7	12.5	22.2	16.5	17.6	26.5
Drowning (submersion)	9.7	6.1	6.5	2.2	2.9	1.5
Firearms and explosives	31.0	30.2	31.0	34.3	36.1	26.3
Cutting and piercing instruments	18.3	14.5	8.3	2.7	2.3	1.8
Jumping from high places	0.7	1.5	1.6	4.2	2.9	4.0
	Female					
Poisoning by solid or liquid substance	40.5	48.0	31.6	55.5	46.7	38.0
Poisoning by gases in domestic uses	-	5.9	21.8	2.1	1.0	0.2
Poisoning by other vapours and gases	-	-	-	5,9	6.3	11.5
Hanging, strangulation and suffocation	11.9	10.5	14.5	9.6	10.7	23.0
Drowning (submersion)	22.6	12.5	15.5	4.3	9.2	5.2
Firearms and explosives	7.1	4.6	6.2	8.2	10.2	7.5
Cutting and piercing instruments	15.5	11.2	4.1	3.4	3.1	1.8
Jumping from high places	-	3.5	4.1	6.6	7.5	7.3

Note: Does not include percentage using unspecified means.

The use of firearms among 20 to 30 year old males has remained reasonably stable after increasing since the 1930s. This has attracted special attention by groups lobbying for or against the ownership of guns by the general public. Some researchers have claimed that a three fold increase in the adolescent suicide rate since the mid-1950s is almost entirely attributable to an increase in suicide by firearms. The American evidence further indicates that

the rate of suicide by gun has grown in parallel with increase in the domestic production, sales and private ownership of firearms - and grown most where gun control laws were least restrictive. Furthermore, studies have also revealed that stricter gun controls were associated with a lower total suicide rate for those aged 15 to 24 years.

Recently Cantor and Lewin[10] have made a detailed analysis of firearms and suicide in Australia. Using data for 1961-1985 they statistically analyzed the trend in suicide by guns. These findings show that during this period overall suicide rates for Australia actually registered a decline but the firearm suicides remained constant with the resulting increase in the proportion of suicide by firearms. Young males showed the greatest proportional increase in the use of firearms. There analysis also supported their hypothesis that lack of legislative restrictions on long guns in Queensland with a greater household prevalence of such weapons and different cultural attitudes were associated with higher overall and firearms suicide rates. Their findings, therefore, are consistent with the findings which have been reported in North American studies. They conclude that reducing the availability and cultural acceptance of firearms is likely to decrease suicide rates, especially in males in Australia.

Another aspect which has been of interest to social analysts is association between the methods of suicide and ethnicity or national origin. This interest is grounded in the notions that suicide is a culture bound behaviour and that people tend to conform with the mores of their respective culture in death just as they do in life. This has led to the examination of the methods of suicide adopted by Australian born and those born overseas.[11]

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10 Cantor, C.H. and Lewin, T. 1990, 'Firearms suicide in Australia', *Australian and New Zealand Journal of Psychiatry*, 24, 500-509.

11 Burvill, P.W., McCall, M.G., Reid, T.A., Stenhouse, N.S. 1973, 'Methods of suicide of English and Welsh immigrants in Australia', *British Journal of Psychiatry*, 123, pp. 285-94; Burvill, P.W. 1979, 'Methods of suicide in Western Australia', *The Medical Journal of Australia*, 29, pp. 411-414.

Table 11.3
Firearms Availability and Australian Suicide Rates 1975-1977

State	Guns per 1000 persons	% of households owning a gun	Suicide rate per 100,000 pa	% suicide by firearms	
				M	F
NSW	189	25.4	10.74	30.2	7.7
Victoria	145	27.4	9.46	34.9	7.0
Queensland	179	28.9	12.97	44.1	6.7
SA	162	26.5	11.35	45.0	13.0
WA	136	19.5	9.91	21.1	1.2
Tasmania	211	31.7	10.24	44.4	10.5
NT	Not known	Not known	11.00	53.9	42.9
ACT	As NSW	As NSW	9.55	28.2	-
Australian Total	**167**	**26.3**	**11.15**	**35.0**	**7.6**

Source: Cantor and Lewin, op. cit.

Whitlock[12] probably has explored this problem most systematically in the Australian context. The result of his analysis reported in Table 11.4 indicate that there are significant differences among Australian born and immigrants in the methods they choose to suicide.

The most striking differences occur in the case of migrants from Southern and Eastern Europe and the Australian born. But the data does not show a systematic pattern indicating either that the suicide methods of immigrants from various countries differ from Australian born and furthermore their methods are similar to methods of suicide in their native countries. On both of these issues the data does not provide a clear pattern. It is possibly due to the smallness of the immigrant suicides as well as due to the socialization factor. The latter implies that suicide method may have cultural contents which change in the case of immigrants as a result of their assimilation and integration into the social and cultural pattern of the host country. This means that eventually the methods of suicide tend to converge and variation which occur can be attributed to gender,

12 Whitlock, 'Suicide in Australia', op. cit.

age, accessibility and convenience. Similar findings have been reported by Burvill et al. but from a sample of immigrants from England and Wales.[13]

The cultural perspective hypothesis also implies that methods individuals use in a society have significant social connotations. For example, in the Chinese society an individual's most important duty and responsibility is towards his or her parents. This takes precedence over any other interest, including self-interests. The essential expression of this is filial piety, which is the individual's way of repaying parents for giving life and for raising the individual. One corollary of filial piety as anthropologist Francis Hsu has pointed out is that an individual must not knowingly invite danger to his or her body or life because to do so means harm to his or her parents.[14]

From the perspective of Chinese culture, therefore, the mutilative and violent method of committing suicide is more than a matter of convenience, it is an expression of intergenerational conflict as well and this interestingly is what the contents of the suicide notes written by young Singapore Chinese men and women reveal very clearly.[15]

Another example of the cultural and symbolic factors in suicide methods is the 'forest suicides' in Japan. Aokigahara-Jukai (Jukai) a dense forest at the foot of Mt Fuji near Tokyo has been known as a leading suicide site in Japan since the 1340s when the first suicide was committed by a Buddhist monk. The monk is reported to have prayed while fasting until death in a cave in Jukai to purify himself. Since then Jukai has gradually become a popular suicide site. According to local folklore, once a person had entered this forest, it would be impossible to find a way out.

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13 Burvill et al., op. cit.

14 Hsu, Francis R.K. 1969, *The Study of Literate Civilizations*, Holt, Rinehart and Winston, New York.

15 Hassan, R., *A Way of Dying*, op. cit.

Table 11.4

Methods of Suicide: Percentage Distribution by ICD Categories E970 to E979 among Immigrants in Australia by Country of Origin

Country of Origin	Sex	ICD E970	ICD E971	ICD E972	ICD E973	ICD E974	ICD E975	ICD E976	ICD E977	ICD E978	ICD E979
Australia	M	28.6	4.3	7.2	7.4	9.8	3.7	33.0	1.6	1.5	2.9
	F	62.2	4.9	11.5	1.3	4.5	5.0	5.3	0.9	1.5	2.9
	M and F	41.6	4.6	8.9	5.0	7.8	4.2	22.3	1.3	1.5	2.8
England and Wales											
(a)	M	29.6	3.6	16.1	10.3	11.1	3.6	18.2	5.0	1.1	1.4
	F	67.3	4.4	14.4	0.0	4.4	2.5	2.0	0.0	2.5	2.5
(b)	M	23.1	2.5	87.4	4.1	13.4	5.9	5.2	2.0	1.6	4.8
	F	44.4	2.3	37.1	0.6	4.9	6.4	0.4	0.6	1.7	1.6
Scotland											
(a)	M	31.9	2.7	11.1	12.5	9.7	2.7	16.6	6.9	4.1	1.8
	F	64.1	0.0	10.2	0.0	5.1	10.2	2.5	0.0	0.0	7.9
	M and F	43.2	1.8	10.8	8.1	8.1	5.4	11.7	4.5	2.7	3.7
(b)	M	23.0	2.7	34.7	2.3	11.1	8.9	6.3	2.5	2.1	6.4
	F	43.7	3.8	27.0	0.2	5.8	11.5	0.4	0.3	4.2	3.1
	M and F	31.6	3.1	31.7	1.4	9.0	10.0	3.9	1.6	2.9	4.8
Ireland											
(a)	M	32.2	3.6	-	-	14.2	7.2	25.0	7.1	10.7	-
	M and F	44.5	2.8	2.8	-	11.1	5.5	19.5	5.5	8.3	-
(b)	M	7.2	9.1	3.3	3.3	42.1	16.2	9.6	7.5	0.0	1.7
	M and F	7.6	10.3	3.8	4.2	38.8	16.6	8.8	7.6	1.2	1.1
New Zealand											
(a)	M	26.9	-	15.4	19.2	11.5	3.8	19.2	-	-	4.0
	M and F	43.5	-	12.8	12.8	10.2	5.1	10.2	-	-	5.1
(b)	M	14.7	6.5	6.5	12.3	15.5	8.8	26.9	4.3	2.4	2.0
	M and F	23.1	8.2	8.3	9.2	12.7	11.5	18.2	4.0	2.6	2.2
Germany											
(a)	M	20.0	3.6	9.1	5.4	23.6	3.6	29.1	1.9	1.9	1.8
	F	52.2	8.7	13.0	-	-	13.0	-	4.4	8.7	-
	M and F	29.5	5.1	10.2	3.8	16.6	6.4	20.5	2.6	3.8	1.5
(b)	M	12.1	-	7.8	10.2	48.2	5.0	6.1	1.8	3.1	5.7
	F	22.1	-	13.6	9.2	30.8	10.8	0.5	1.4	7.2	4.3
	M and F	15.7	-	9.9	9.8	41.9	7.1	4.1	1.6	4.6	5.3
Greece											
(a)	M and F	23.8	-	-	-	28.6	19.0	9.6	-	-	19.0
Italy											
(a)	M	12.7	14.9	4.2	-	27.6	4.2	23.4	4.2	2.1	6.7
	M and F	11.8	22.0	5.1	-	23.7	5.1	18.6	6.7	1.6	5.1
(b)	M	2.4	5.0	5.8	0.3	37.7	10.5	17.1	2.7	12.7	5.8
	M and F	3.4	7.4	7.8	0.2	32.6	12.9	12.7	2.5	15.2	5.3
Netherlands											
(a)	M and F	46.6	-	13.3	-	10.0	6.6	16.6	-	3.3	3.6
(b)	M and F	11.4	5.5	16.2	0.2	36.8	18.9	1.3	1.3	3.3	5.1
Poland											
(a)	M	14.7	11.5	9.8	1.7	36.0	3.3	19.7	-	3.3	-
	M and F	26.6	8.9	7.6	1.3	34.1	3.8	15.2	-	2.5	-
Yugoslavia											
(a)	M	17.8	2.2	11.1	2.2	28.9	2.2	20.0	2.2	4.5	8.9
	M and F	17.2	3.4	10.3	1.7	27.6	5.4	15.5	1.7	6.9	10.3
Yugoslavia male and rates											
(a) Immigrants in Australia		20.6		12.0		27.6	5.4	15.5	1.7	6.9	10.3
(b) In Yugoslavia		8.8		0.7		59.9	9.7	5.2	2.0	2.5	11.2
(c) Australian-born		46.2		13.9		7.8	4.2	22.3	1.3	1.5	2.8

Whitlock, op.cit.

In the early 1960s a novel which included a final scene in which the heroine tried to commit suicide by entering Jukai was published and became a best seller. Since then Jukai has become even more widely known throughout Japan as a suicide site and method. Mostly young males (20 to 30 years) tend to enter Jukai to suicide. According to a recent study based on the Jukai suicides, Jukai is a popular suicide site now in Japan and people use it when they have definitely decided to suicide. They develop amnesia immediately after entering the forest.[16]

According to this study the meanings of suicide in Jukai are: (1) infectiousness and symbolic factors play a significant role in their choosing Jukai as the suicide site; (2) people tried to purify their death by committing suicide in Jukai; (3) the suicide victims at Jukai felt as if Jukai was a sanctuary where they were accepted and their suicides were allowed; (4) people travel a long way to Jukai and while travelling repeatedly confirmed their will to take their own life at Jukai; (5) they wish to share the same place with others and belong to the same group by choosing Jukai as their suicide site; and finally (6) they wished to disappear without being noticed or disturbed in Mt Fuji's dense forest.[17]

The overall weight of the empirical evidence about suicide methods used in Australia and elsewhere offers a partial support for the 'sociocultural', 'convenience' and 'accessibility' perspectives. But more systematic empirical work is needed to determine the validity and applicability of various competing explanations of the selection of suicide method.

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16 Takahashi, Y.L. 1988, 'Aokigahara-Jukai: suicide and amnesia in Mt Fuji's Black Forest', *Suicide and Life-Threatening Behavior*, 18, 2, pp. 164-176.

17 ibid.

CHAPTER 12

SUICIDE IN AUSTRALIA - AN OVERVIEW

Like other forms of death, suicide denotes sadness and tragedy. But it also carries an additional connotation of stigma. The reason for this is that death in modern society commonly occurs in relatively specialized and institutionalized settings such as hospital, highway, battlefield and on television. Its causes are also socially defined and institutionalized. Death that occurs outside the 'conventional' settings and causes carries a social stigma and strong disapproval. Suicide is death (or dying) out of place and it is this which stigmatises it.

The evidence presented in this book clearly suggests that suicide has become a major public health and social problem in Australia. Suicide now claims one life every four hours which results in the loss of one hundred thousand years life every year. Its increase has been especially dramatic among young Australians fas the following statistics show. In 1960 only 2.3 percent of all deaths of males aged 15 to 24 years was due to suicide; the corresponding percentage in 1990 had increased by tenfold to 23 percent. Among young females of the same age group the percentage has increased from one percent in 1960 to 11 percent in 1990. To describe this change in another way, whereas in 1960 one in every 62 deaths of persons aged 15 to 24 years was caused by suicide, in 1990 one in every five deaths in this age group was due to suicide.

In the preceding chapters an attempt has been made to examine and analyze suicide in Australian society by focusing on a number of key social factors. The aim of the approach adopted is not to minimize the importance of pshchogenic factors in suicide but to highlight its sociological aspects which were first identified by French sociologist Emile Durkheim almost a century ago. The structure of the book and the empirical evidence examined has largely been informed by Durkheim's conceptualization and discussion of the problem.

The empirical studies of suicide have led to both revision and refinement of some of Durkheim's insights. But his general theory that under certain social conditions in which individuals social contexts fail to provide them with requisite sources of attachment and/or regulation at the appropriate level of intensity their psychological or moral health is impaired, and a certain number of vulnerable individuals respond by committing suicide.

Suicide is no longer regarded as an irredeemable moral crime but a fact of society, like the birth rate or rate of unemployment. It has social causes which are subject to discernible sociological laws which can be identified and analyzed scientifically and rationally. In social theory it is viewed fundamentally as a product of the nature of relationship between the individual and the society. The relative degree of regulation, control, isolation and oppression of individuals in society are the primary causes of varying degrees of suicide rates in different societies. These factors are often influenced by social and economic factors such as economic cycles, occupation, age, gender, marital status, social cohesion, urbanization, modernization and public services.

In Australia, the overall suicide rate since the middle of the last century has remained relatively stable although numbers of suicides committed have increased at least by seven fold. Compared with some of the European countries and Japan the Australian suicide rate has remained in the middle range. The empirical evidence examined in Chapter 3 clearly contradicts the widely held perception that social change has been disruptive and injurious to societal health. This is not to deny that social change has had no effect on social organization of society but to the extent that the suicide rate can be taken as a proxy for relative social health and well being, Australia has faired much better than most European countries and Japan over the past one hundred years. This is largely due to the provision of a comprehensive social welfare system in Australia.

The evidence has also revealed that notwithstanding an outward stability in the overall suicide rate in Australia, the incidence of suicide has fluctuated over

the years and these fluctuations appear to be related to economic cycles, demographic change, and other aspects of social structural change such as modernization, divorce rate, welfare transfers, urbanization and female participation in the labour force. More specifically, the evidence examined has revealed that during economic depressions and periods of high unemployment the male suicide rates increased significantly.

The female suicide rate on the other hand appears to be influenced by changes in their social status and position in society. With the acceleration in the process of emancipation of women in Australian society their suicide rate has registered a significant decline resulting in the decline of the male-female suicide ratio.

Another significant shift has occurred in the distribution of suicide across various age groups and theatres of life. Until 1964, suicide was primarily a problem among the older age groups. By the mid 1980s it had changed and suicide had become a problem common to all ages. But in recent years two theatres of life, the very young and the aged, have experienced a significant increase in suicide rates. This increase has been especially marked among males. A number of social factors including unemployment, changing family structure, increasing substance abuse, access to psychiatric services, welfare transfers, improvement in intensive care technology and ideological factors appear to have contributed towards the production of these trends.

The high incidence of suicide among the young and elderly may also be due to the high dependency of these groups in society. Dependency itself does not automatically produce adverse consequences but if stigmatized it creates social disruption and disorganization. The dependency experienced by the young and the aged in modern advanced industrialised market societies like Australia is stigmatized due to their reduced ability to engage in reciprocal social exchange as a result of factors such as prolonged unemployment, poverty,, life long disability and ill-health. The experience of stigmatized dependency by the young and elderly

reduces their level of social integration in society and increases their sense of isolation thus producing two very potent causes of suicide vulnerability.

Contrary to the general impression, suicide rates of metropolitan areas and non-metropolitan areas do not differ significantly. The metropolitan areas have experienced a slight decline over the past thirty years whereas the rates for the non-metropolitan areas have remained static. The most significant change over the past twenty years or so has occurred in the suicide rates of young males aged 15 to 19 residing in rural areas. For example, the rate of young males residing in small towns of New South Wales increased from 5.1 in 1966 to 12.5 in 1986 and the corresponding increase in the case of young males residing in rural shires and municipalities increased from 3.5 to 21.6.

The empirical evidence also suggests that in general suicide among rural males has increased over the past thirty years. It has been suggested that this may have happened due to the rural crisis which has affected males more than females because of their structural position in rural society. Their situation is further aggravated by the mythology of the bush which confers on men, young and old, an expectation of ruggedness thus preventing some of them at least from seeking professional help when they are under stress.

There are significant differences in the distribution of suicide within metropolitan areas in Australia. These differences are related to specific socio-economic and demographic factors. The metropolitan localities characterized by higher densities, a disproportionate concentration of young and aged, economically disadvantaged, single, divorced and widowed males, recent migrants and mentally ill persons tend to have higher suicide rates.

Analysis of the relationship between suicide and temporal cycles indicates that in Australia men suicide more frequently on Mondays and women on Mondays and Tuesdays. The variations by seasons show that spring had the highest occurrence for both sexes followed by winter months. The general hypothesis advanced about Monday peak is that it is probably related to

employment and work activities. The fact that this trend is more pronounced for men would tend to lend support to this hypothesis since male participation in the labour force is higher than female. But as more and more women enter the labour force the Monday peak is likely to appear among them as well and this is what the data suggest to be the case in Australia.

One of the key hypotheses first proposed by Durkheim to explain the relationship between 'social facts' and suicide was that individuals who belong to an organized work force tend to have significantly lower suicide rates because gainful employment acts as a protection from suicide and other forms of social disorganization. Unemployment or work loss on the other hand weakens the level of an individual's social integration in society and deprives him/her of a social role and status and increases social isolation all of which are positively associated with suicide. Empirical evidence has tended to provide strong support of the above hypothesis.

The relationship between occupation and suicide is more complex partly due to the methodological difficulties in obtaining reliable occupational data. The existing evidence on the subject suggests that there is no linear correlation between occupational status and incidence of suicide. Unemployment and downward occupational mobility have been found to be important factors in explaining variations in suicide rates. The reasons being that under downward occupational mobility the 'self-image' is impaired and leads individuals to perceive their downward mobility as a sign of rejection and negative evaluation of their self-worth - factors which consequently increase their sense of alienation and anomie and reduces their level of social integration in society and consequently their vulnerability to suicidal behaviour.

The general pattern in Australia in the case of men, for whom more reliable data is available, is that those in blue collar occupations which are characterized by low job autonomy, greater external supervision, less on the job training, poorer

promotional possibilities, lower wage levels and greater sensitivity to market forces tend to have higher suicide rates and their rates increase significantly with age.

Sociological studies generally show that because of the social and emotional stability and security provided by the 'family society' the suicide rate among married persons tend to be significantly lower compared with the incumbents of other marital statuses. Married life provides a sense of cohesiveness and support which is unavailable to unmarried, widowed and divorced. Perhaps the most significant theoretical and methodological analysis of Durkheim's theory, that the suicide rate of a population varies inversely with the degree of social integration, has been undertaken by using marital status as a proxy variable for social integration. The best known empirical test of the theory conducted by Gibbs and Martin have produced evidence which supports Durkheim's theory.[1]

The Australian data examined in this book also supports the general thrust of the theory that 'coefficient of preservation' is much higher among married persons. This general pattern as demonstrated in Chapter 8 largely holds for younger men and women but among the aged the pattern becomes more complex. Some of the complexity in the pattern can be attributed to the changes in the meaning of various marital statuses in contemporary Australian society which, it has been argued, tend to compound the patterns of relationship between marital status, social integration and suicide rates. For example, since the 1960s the suicide rate of divorced persons has registered a considerable decline, a pattern which is contrary to the findings reported in earlier studies. This decline has been much more significant among women than men. The main reason for this change is the diminishing of the stigma which has been historically ascribed to divorce.

The suicide rates of overseas born tend to be significantly higher than the Australian born. These differences have been attributed to two factors. Firstly, to the disruption of social ties caused by immigration and resulting 'anomie' from it and secondly to a greater degree of individual psychological dysfunctioning and

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1 Gibbs and Martin, op. cit., also see Chapter 8.

mental ill-health resulting from immigration. Both factors partially explain the observed differences in the suicide rates between migrants and Australian born. But the lack of appropriate empirical data makes it difficult to assign primacy to one factor over the other.

The fact that suicide rates of migrants in Australia correspond with suicide rates in their native country suggests that suicidal behaviour is culturally bounded behaviour. When the cultural patterns of immigrants change as a result of assimilation or integration into Australian society their suicide rate also begins to drift towards the Australian norm.

Suicide rates among immigrant groups from different countries in Australia vary considerably. A possible explanation of different suicide rates among migrant groups in Australia, all of whom experience anomic and psychological dislocation upon immigration, is the connection between 'object-loss' and immigration. The rationale for this connection is as follows: migrants are both deserting and deserted. Migration itself may be a strategy of risk taking behaviour in search of self-transformation. To the extent that such change is either restricted or impossible, the guilt for having rejected past values and rituals intensifies as the dream of self-transformation fades which intensifies self-rejection and self-hate. Those who migrate to a greater or lesser extent crate a modified 'object-loss'. This results not only from the material fact that others have been left behind but also because ritual structures which enable them to deal with loss have also been abandoned or cannot be re-established. It is, therefore, not migration per se that leads to suicide but rather that those migrants who lack ritual and social support face a higher risk of suicide.[2]

The empirical data examined in Chapter 9 offers some support for this theory. It shows that English speaking migrants tend to move closer to the Australian norm as the period of residence increases and presumably as they are assimilated in the ritualized ways of coping with object-loss because of the cultural

2 See Chapter 9 and Kushner, op. cit.

similarities between their home countries and Australia. The Southern European migrants experience a greater sense of object loss in the initial years but as they are incorporated and assimilated in the sizeable and distinct Southern European communities in Australian cities their suicide rates also decline dramatically. Those immigrants who are unable to experience either of the two patterns continue to experience high suicide rates in Australia for a longer period.

Several etiological classifications of suicide have been advanced by sociologists. The best known was offered by Durkheim who viewed suicide resulting from strength and weakness of society's control over the individual. He posited four basic types namely altruistic, egoistic, anomic and fatalistic, each postulating a specific type of individual-society relation. But his and other similar classifications are not very useful in analyzing the individual cases and specific circumstances leading the individual to suicide. The exploration of the later phenomenon in this study has revealed that 'relational' problems (unhappy love, family/marital problems, guilt and burden, shame and guilt), instrumental problems (financial and unemployment problems, a sense of failure in life), and health problems (physical illness, mental illness, physical and mental illness, drug and alcohol abuse) are some of the principal circumstances preceding suicide in Australia.

Among young women the principal cause appears to be related to relational problems, among middle aged women the problems tend to be of 'instrumental' type succeeded by health and instrumental causes among the aged. Among men, health problems keep their primacy for the aged. But among young men the principal causes tend to be related to the instrumental factors, followed by 'relational' problems among the middle aged. In short, different theatres of life appear to produce their own special circumstances. Suicidal youth are pre-occupied by relational, emotional and instrumental problems. The aged suicides on the other hand are occupied by problems of ill-health and inability to maintain social bonds due to instrumental and relational difficulties.

The evidence also shows that two specific groups of people in modern societies - prisoners and persons suffering from life-threatening illnesses - tend to have very high suicide rates. In Australia, prisoners' suicide rates tend to be around eleven time higher than the national average. One out of every two deaths in Australian prisons tends to be due to suicide. Similarly, people suffering from chronic and life-threatening illnesses such as cancer and AIDS/HIV infection tend to have elevated suicide. There is no reliable data about suicide among HIV infected and AIDS patients. The impressionistic evidence reported in this book tends to support the American studies that persons who are found to be HIV positive and suffering from AIDS tend to have significantly higher suicide rates than the public at large. It has been suggested that the causes of suicide among high-risk groups should be addressed through appropriate policy changes at the Commonwealth and State levels.

The methods people use to suicide tend to have important symbolic content which is largely a function of the socialization processes. The selection of methods commonly used are determined by convenience, accessibility and socio-cultural factors. But within these parameters there appears to be significant differences between men and women. Women tend to use passive methods most frequently whereas men use more violent methods although the use of guns to suicide appears to be declining and preference for passive methods increasing among men in recent years as well. The severity of gun laws appears to be negatively associated with the use of violent methods, especially suicide by gun shots.

The empirical evidence presented and analyzed in the book shows that suicidal behaviour like other forms of social behaviour has important symbolic content and in the final analysis it is shaped by the same social forces which influences and regulates the other general patterns of social life. In other words, all the reasons which are good enough to live for are also good enough to die for.

Strategy for Suicide Prevention: Some Strategic Directions

In 1990 one Australian life was claimed by suicide every four hours. Altogether, about one hundred thousand years of life are lost every year through suicide which costs the Australian economy millions of dollars. The loss, pain and grief suffered by the family and the community is even greater and more profound than the economic loss.

It is not beyond our collective abilities and capabilities to institute a suicide prevention programme which can reduce this enormous loss of unlived lives in Australia by at least 20 percent. To do so we need to recognize the magnitude of the problem and willingness to invest resources to develop suicide prevention programmes and train people who can implement them. We need to integrate suicide prevention activities better into our existing programmes which focus on a whole range of self-destructive or problem behaviours, especially among our youth such as drug abuse, interpersonal violence, school drop outs, runaway or homeless youth.

We need to inform and educate the public, the media, the entertainment industry and health services about our current knowledge in diagnosis, treatment and prevention of suicide. Public education should address the issue of removing stigma associated with alcohol, drug abuse and mental health treatment in order to increase accessibility of vulnerable individuals facing these problems to seek treatment freely.

Parents, teachers, youth counsellors, juvenile and criminal justice personnel, caregivers, and clergy need to be educated how to identify suicidal tendencies among persons in their care. Hospital emergency room personnel should be trained in suicide risk assessment as some accident injuries and also some drug abuse episodes may in fact represent suicide attempts. The suicide prevention programme must be family, community and school based. Besides the public agencies, involvement of business and industry in the prevention programme is crucial in providing and encouraging youth employment and counselling

programmes for the employees who may be at increased risk for suicide. Solutions to the suicide problem will require a variety of factors at all levels of society from Commonwealth, State and Local Government, to religious, business, educational, health care providers, community and family involvement.[3]

Studies of suicides, especially among the young, show that over 80 percent of the suicide victims had talked about their suicidal state of mind with others within a week of their death.[4] These communications are often made to close friends or family members. Suicidal acts have enormously different outcomes for various age groups. Among young persons between 15 to 24 years of age only one in 40 suicide attempts actually result in death. An estimated 15 to 27 percent of attempters will probably never repeat their attempt, and this percentage is still higher among those who make suicide threats or communications. This means broadly based suicide prevention programmes can be very effective in reducing loss of life through suicide. As a community we have a collective responsibility to institute and fund such programmes as part of health and social welfare services in order to create conditions which would allow at least some members of the high suicide risk groups in our society to believe that their unlived lives are worth living.

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3 These observations are based on an address by Dr Dorynne Dzechowicz, Assistant Director for Medical and Professional Affairs in the Office of Science at the National Institute for Drug Abuse, Washington D.C. to the 1987 meeting of the American Association of Suicidology. A useful guide for coping with suicide is Smith, J. 1986, *Coping with Suicide: A Resource Book for Teenagers and Young Adults*, The Rosen Publishing Group Inc., New York.

4 Brent, D.A., Perper, J.A., Goldstein, E.E., Kalko, D.J., Allan, M.J., Allman, G.J. and Zelenck, J.P. 1988, 'Risk factors for adolescent suicide: a comparison of adolescent suicide victims with suicidal in patients', *Archives of General Psychiatry*, 45, pp. 581-588.

APPENDIX A

Suicide in Australia by Country of Birth and Length of Residence

Country of Birth		0-9 Years			10+ Years			All Years*		
		M	F	P	M	F	P	M	F	P
England & Wales	Number of Suicides	284	104	388	792	322	1114	1172	453	1625
	Population	100897	97918	198815	356110	344120	700230	463583	449654	913237
	Rate	21.65	8.17	15.01	17.11	7.20	12.24	19.45	7.75	13.69
Scotland	N	34	20	54	182	76	258	233	103	336
	P	12030	11885	23915	62792	62154	124946	76116	75516	151632
	R	21.74	12.94	17.37	22.30	9.41	15.88	23.55	10.49	17.05
Ireland	N	26	11	37	77	25	102	118	40	158
	P	8042	8189	16231	27003	23269	50272	35676	32057	67733
	R	24.87	10.33	17.54	21.93	8.26	15.61	25.44	9.60	17.94
Austria & Hungary	N	28	9	37	131	79	210	173	95	268
	P	2384	2181	4565	25336	20083	45419	28158	22634	50792
	R	90.35	31.74	62.35	39.77	30.26	35.57	47.26	32.29	40.59
Czechoslovakia	N	15	10	25	29	18	47	55	28	83
	P	1114	966	2080	8355	5516	13871	9609	6545	16154
	R	103.58	79.63	92.45	26.70	25.10	26.06	44.03	32.91	39.52
Germany	N	54	20	74	179	89	268	267	117	384
	P	5862	5831	11693	48354	48948	97302	55127	55632	110759
	R	70.86	26.38	48.68	28.48	13.99	21.19	37.26	16.18	26.67
Greece	N	16	10	26	49	22	71	73	34	107
	P	6887	7675	14562	66615	62152	128767	75213	71411	146624
	R	17.87	10.02	13.73	5.66	2.72	4.24	7.47	3.66	5.61
Italy	N	42	9	51	193	69	262	251	79	330
	P	7622	7599	15221	138310	115823	254133	149686	126201	275887
	R	42.39	9.11	25.77	10.73	4.58	7.93	12.90	4.82	9.20
Malta	N	7	0	7	26	10	36	33	10	43
	P	3601	3698	7299	26354	22175	48529	30628	26373	57001
	R	14.95	0	7.38	7.59	3.47	5.71	8.29	2.92	5.80
Poland	N	6	5	11	152	65	217	178	73	251
	P	3004	3743	6747	28433	22247	50680	32032	26408	58440
	R	15.36	10.28	12.54	41.12	22.47	32.94	42.75	21.26	33.04
USSR & Ukraine	N	3	6	9	72	34	106	79	42	121
	P	2677	2973	5650	10586	11128	21714	13520	14387	27907
	R	8.62	15.52	12.25	52.32	23.50	37.55	44.95	22.46	33.35

APPENDIX A: CONT.

Country of Birth		0-9 Years			10+ Years			All Years*		
		M	F	P	M	F	P	M	F	P
Yugoslavia	N	92	37	129	143	34	177	271	73	344
	P	11441	14022	25463	68447	52568	121015	81528	67805	149333
	R	61.86	20.30	38.97	16.07	4.98	11.25	25.57	8.28	17.72
Baltic	N	25	5	30	118	45	163	166	52	218
	P	3008	2986	5994	22527	18398	40925	26003	21701	47704
	R	63.93	12.88	38.50	40.29	18.81	30.64	49.11	18.43	35.15
Europe nec	N	47	23	70	135	51	186	200	81	281
	P	15217	13198	28415	70153	58504	128657	86780	72738	159518
	R	23.76	13.41	18.95	14.80	6.71	11.12	17.73	8.57	13.55
India	N	18	10	28	27	12	39	48	22	70
	P	7031	7296	14327	13484	13230	26714	20839	20816	41655
	R	19.69	10.54	15.03	15.40	6.98	11.23	17.72	8.13	12.93
Asia nec	N	51	34	85	59	35	94	125	72	197
	P	88889	102312	191201	65612	57117	122729	157602	162008	319610
	R	4.41	2.56	3.42	6.92	4.71	5.89	6.10	3.42	4.74
America	N	60	26	86	28	17	45	96	46	142
	P	29980	30184	60164	18307	16490	34797	48973	47270	96243
	R	15.39	6.63	11.00	11.77	7.93	9.95	15.08	7.49	11.35
New Zealand	N	68	28	96	52	38	90	140	71	211
	P	59365	57502	116867	28221	27101	55322	89781	86930	176711
	R	8.81	3.75	6.32	14.17	10.79	12.51	11.99	6.28	9.18
Others	N	35	19	54	61	38	99	395	112	507
	P	37053	27397	64450	35312	34536	69848	73658	63238	136896
	R	7.27	9.83	4.18	7.62	7.80	3.85	3.66	4.26	1.97
Total born overseas	N	911	386	1297	2505	1079	3584	4075	1603	5678
	P	406104	407555	813659	1120311	1015559	2135870	1554512	1449324	3003836
	R	17.26	7.29	12.26	17.20	8.17	12.91	20.16	8.51	14.54

*Including not stated
Suicides in Australia 1968-1980
Population (all ages) as at 1981 Census

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