

SEX, MARITAL STATUS AND SUICIDE: A REPLICATION AND
REFINEMENT OF THE WORK OF W. R. GOVE

by

LYNNE ALISON CHISHOLM

B.A. (Hons.), University of Sheffield, 1973

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

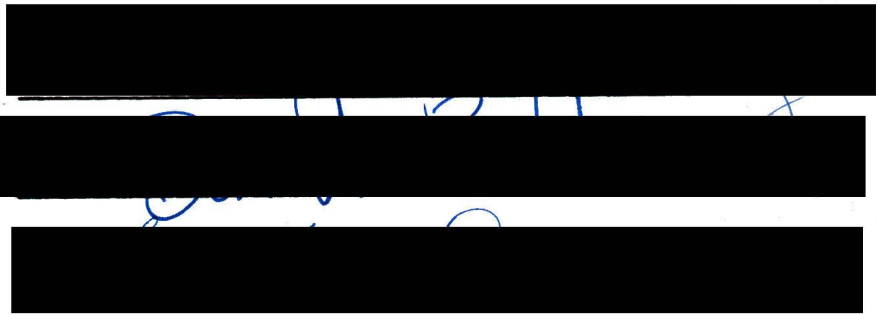
Sociology

ACCEPTED

FACULTY OF GRADUATE STUDIES

DATE 12 Nov 1974

We accept this thesis as conforming
to the required standard



LYNNE ALISON CHISHOLM, 1974

UNIVERSITY OF VICTORIA

October, 1974

All rights reserved. This thesis may not be reproduced in whole or in part, by mimeograph or other means, without the permission of the author.

Supervisor: Dr. Elaine Cumming

ABSTRACT

An attempt is made in this study to provide empirical support for widely-held beliefs concerning the problematic nature of the adult female role in modern society by looking at suicidal behaviour. The concept at the core of this discussion of women's role is that of role conflict, and it is assumed that married women, and more especially, married and employed women, are the groups most at risk from stress (and its consequences) engendered by such role conflict. Suicide is regarded as an indicator of stress.

Four hypotheses were tested, using Canadian data, which involved both replication and extension of the recent work conducted in the United States by W. R. Gove (1972a). Using the coefficient of preservation developed by Durkheim (1951) as a measure, it was found that (i) women in Canada are less protected by marriage against suicide than are men, and (ii) the shift from being married to being widowed and divorced has a more negative impact upon men than women in Canada. These findings support Gove. However, Gove's finding from United States data that the discrepancy between the degree of protection afforded by marriage from

suicide for males and females was increasing over time was not supported in this study. A further proposition, derived from Gove, that married and employed women will be at greater risk of role conflict and hence enjoy a lesser degree of protection against suicide than women married but not employed was not supported.

The overall results of this study can be most economically interpreted in terms of Durkheim's theory of integration as a protection against suicide. If the differences in male and female suicidal behaviour as reported here can be explained in terms of role strain, a more complex explanation than that favoured by Gove is needed. An alternative explanation involving both role conflict and role rewards is also suggested.

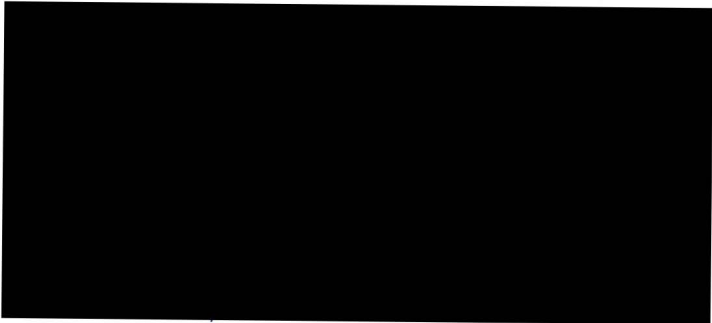


TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION	1
Footnotes.	5
II. BACKGROUND OF THE PRESENT STUDY OF SEX, MARITAL STATUS AND SUICIDE	6
(i) The Work of W. R. Gove.	6
(ii) Factors in Support of the Role Explanation as put forward by Gove.	10
(iii) The Role of the Adult Married Female in Modern Society	14
Footnotes.	26
III. METHOD: RESEARCH DESIGN	29
Footnotes.	35
IV. FINDINGS AND INTERPRETATION.	39
Footnotes.	67
V. CONCLUSION	69
BIBLIOGRAPHY	73
APPENDIX A: POPULATION STATISTICS AND SUICIDE RATES: TABLE VIII, (i) - (xii)	81
APPENDIX B: ADDITIONAL FINDINGS	88

TABLE

Page

IX.	COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE NEVER MARRIED AND THE MARRIED BETWEEN ALL CANADA AND BRITISH COLUMBIA, AVERAGE FOR AGES 25-64, 1951, 1961 AND 1971 . . .	88
X.	COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE WIDOWED/DIVORCED AND THE MARRIED BETWEEN ALL CANADA AND BRITISH COLUMBIA, AVERAGE FOR AGES 25-64, AND AGES 65+, 1971. . . .	89
XI.	COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE NEVER MARRIED AND THE WIDOWED/ DIVORCED AS COMPARED WITH THE MARRIED BETWEEN CANADA AND THE UNITED STATES BY AGE, 1961	90

LIST OF FIGURES

FIGURE	Page
1. IMPORTANT SOURCES OF STRESS FOR MALES, SINGLE FEMALES, HOUSEWIVES, AND MARRIED FEMALES GAINFULLY EMPLOYED	17

ACKNOWLEDGEMENT

I would like to acknowledge the help of my committee in the preparation of this thesis: Dr. Elaine Cumming and Dr. Donald W. Ball of the Department of Sociology at the University of Victoria; and Dr. Leland Donald of the Department of Anthropology at the University of Victoria.

I would in particular extend my most sincere thanks to my supervisor, Dr. Elaine Cumming, who gave unstintingly of her time and energy in support and assistance of the work presented here.

I would also like to thank Mr. L. W. Hole, of the Division of Vital Statistics at the Department of Health and Welfare, Victoria. He provided data not normally available, without which part of this study could not have been conducted.

CHAPTER I

INTRODUCTION

Much has been written concerning the role of women in modern western society. This literature indicates, firstly, that women are in a disadvantageous position in comparison with men in a number of ways; and secondly, that the roles available to adult females are likely to lead to conflict, frustration and stress for at least some women (Greer, 1971; Mitchell, 1971; Gavron, 1969). In the next chapter further attention will be paid to these points when the role of the adult married female in modern society is discussed.

The problem of role conflict as experienced by adult women, and particularly by those who are married, has been the major focus of many discussions in the newly developed field of women's studies. The existence of role conflict itself as a sociological phenomenon is not in dispute, but little empirical work has focussed directly on the question of whether role conflict is indeed experienced by a substantial proportion of women, particularly married women.

W. R. Gove (1972a) has provided some indirect

evidence that women are experiencing role conflict through direct evidence that marriage affords women less protection against suicide than it does men, using Durkheim's (1951) coefficient of preservation as a measure. Gove's empirical demonstration of protection against suicide by marriage for men and women is linked by the concept of stress to the theoretical expectation of greater role conflict for adult married women as compared with adult married men.

Stress may be defined as an unpleasant emotional experience, or strain, resulting from a failure of routine methods of coping with situations or events which are stressful.¹

Gove sees role conflict as leading to stress, and suicide as an indicator of stress; he has several reasons, outlined below, for concluding that a role conflict explanation of the empirical differences is the most plausible one.²

The main purposes of the present study are, *firstly*, to replicate Gove's United States study using Canadian data, proposing that women in Canada are less protected by marriage from suicide than are men. This proposition is upheld by the data. *Secondly*, the study is designed to test the proposition that, if this role-related explanation is correct, women who are both married and employed will suffer greater role conflict than women married and not employed, and that this difference will be reflected in the

coefficient of preservation. The second proposition is not upheld by the data.

Two further hypotheses, derived from propositions relating to the differences in degree of protection against suicide by marriage for men and women in terms of role, are also tested. The *first* of these predicts a replication of Gove's finding in the United States data of an increase in the discrepancy between the coefficients of preservation calculated for men and women over time. This trend is not observed in the Canadian data.

The *second* hypothesis predicts that a higher proportion of widowed and divorced men as compared with women in the same situation, will commit suicide. Gove's (1972a) data indicate that widowhood and divorcement are not as traumatic for women as for men. Using Canadian data this second hypothesis is upheld, although the strength of the relationship is not as great as that which Gove found.

The present study cannot be said to support empirically the theoretical expectation that Canadian women are suffering more stress than are Canadian men due to the nature of the adult female role-set in modern western society.

In summary, this study is an attempt to replicate and extend Gove's theory of the problematic nature of the adult female role and of the existence of role conflict amongst adult women by focussing upon the groups hypothe-

sised as most at risk: married women, and, even more so, married and employed women. Data from the Canadian Census and the British Columbia Division of Vital Statistics at the Department of Health Services & Hospital Insurance were used.

Footnotes

¹This definition is a simplified version of that given by Gross, 1970: 54-56.

²See Chapter 2, Section (ii).

CHAPTER II

BACKGROUND OF THE PRESENT STUDY OF SEX, MARITAL STATUS AND SUICIDE

(i) The Work of W. R. Gove

Gove (1972a) analysed the relationship between sex, marital status and suicide in the United States, using suicide as an indicator of stress. He calculated the same index used by Durkheim (1951) in his classic study, *Suicide*, to demonstrate that the protection from suicide afforded by marriage is not of the same order for men as for women. This index is the *coefficient of preservation*, a ratio measure, obtained by dividing one suicide rate by another.

In the present study, we are interested in the coefficient of preservation resulting from dividing the never-married suicide rate by the married suicide rate, separately computed for males and females. The figure that results reveals a relationship between the two suicide rates such that *the bigger the coefficient, the more the preservation of the group used as denominator*. By comparing coefficients of preservation for males and females, any difference in the *relationship* between the never-married suicide rate and the married suicide rate for the two sexes can easily be seen. The coefficient of preservation is a simple and useful

measure, but one which can cause confusion. In an attempt to remove any possible confusion in the understanding of the coefficients of preservation resulting from the present study, the following should be noted:

$$\frac{A \text{ sr}}{B \text{ sr}} = x \text{ C of P, where sr = suicide rate;}$$

and C of P = coefficient of preservation;

and x = the value of the C of P.

Then: 1. Where $A \text{ sr} > B \text{ sr}$, then $x > 1$.

This indicates a greater degree of protection against suicide for B group as compared with A group.

2. Where $A \text{ sr} < B \text{ sr}$, then $x < 1$.

This indicates a lesser degree of protection against suicide for B group as compared with A group.

3. Where $A \text{ sr} = B \text{ sr}$, then $x = 1$.

This indicates an equal degree of protection against suicide for A and B groups in comparison with each other.

That marriage *per se* offers a degree of protection against suicide, in that the married suicide rate is always lower than the never-married, widowed, and divorced rates was first documented by Durkheim (1951) in *Suicide*. This finding has been repeatedly observed by modern sociologists. Durkheim used this rate to support his theory of anomie.

This theory proposes that differences in suicide rates can be explained by differences in social ties or solidarity, or differences in the degree of *integration* of the members of a given social group. This variable, of course, does not take up all the variance, but Durkheim presented convincing evidence that the level of integration of a given statistical group is an influential factor.

Durkheim thought that the differences between the suicide rates of the never-married and the married were influenced by the married having a greater number of *affiliations*, and thus being better integrated into the society. Durkheim's explanation for the higher suicide rates of the widowed and divorced as compared with the married was the same. According to this explanation, never having had as many affiliations, however, is not so debilitating as the sudden withdrawal of some of the most rewarding and valued affiliations.

Durkheim computed the coefficient of preservation separately for males and females, and the difference he found he explained in terms of the varying nature of the institution of marriage in different societies. Gove's (1972a) contribution has been to focus on the discrepancy between the coefficients of preservation for the two sexes within modern western industrial society in the course of looking for evidence of the conflict-laden nature of the adult female role in modern western society. Taking the

United States as an example, he proposed a detailed explanation of the differences between the coefficients of preservation that emerge. Using 1960 United States Census data, he showed that women enjoyed a lesser degree of protection from suicide by marriage than men. Prior to this 1972 study, he had, together with J. F. Tudor (Gove, 1972b; Gove & Tudor, 1973), found a similar relationship among sex, marital status and mental illness. Using an analysis similar to the one employed in his suicide study, he found that married women are more likely than married men to become mentally ill, whereas this difference is not nearly so clear between single men and women (Gove, 1972b: 37-39). In the course of showing that more women than men seem to suffer from the milder forms of mental illness, Gove draws attention to the fact that women *attempt* suicide far more than do men. He sees both attempted suicide and the milder forms of mental illness as responses to stress. Gove concludes these rates reflect the stress inherent in the adult female role today.

Gove does not suggest that the adult male role in modern western society is devoid of stress, but only that the adult female role is likely to generate *more* stress. Summarised, Gove's argument is that more and more women are encouraged to participate in spheres other than the domestic, yet the traditional female role for the married woman is not sufficiently flexible to allow such partici-

pation without the generation of unresolvable conflict. Thus married women are now more subject to stress, and consequently at risk of suicide, than we would expect on the basis of Durkheim's original argument. It is important to remember that the reason Gove is postulating a lesser degree of protection from suicide by marriage for women is *not* the same reason that Durkheim gave for the 'protection' he demonstrated. Durkheim's explanation of protection was the greater level of affiliation among the married. Gove suggests that today's lesser degree of protection for married women as compared with married men is related to stress resulting from role conflict of various kinds. These two different forces, of course, can both be operative at the same time, tending to cancel one another out.

(ii) Factors in Support of the
Role Explanation as put forward by Gove

The coefficient of preservation (cf. Durkheim, 1951: 182-3) can be explained in different ways. Durkheim did consider that it merely reflected the possibility that stable people are more likely to marry than the unstable.

In Gove's words, Durkheim

concluded in this instance that the coefficient of preservation reflects primarily the roles people occupy, for the coefficient is largest during the early ages (20-25 and 25-30 yrs.) when, in his population, the effect of selective processes is minimal (i.e., when many of the persons who are going to get married are still

not married). The coefficient immediately starts to decline and is considerably smaller when the effect of the selective processes should be maximum (i.e., when the 'stable' persons have married and the single group is comprised of the residual 'unstable' population) and where the selective argument suggests the coefficient should be the largest.¹

Durkheim was led to conclude that it is "...in the constitution of the family group [that] we must find the principal cause of the phenomenon [variation in the coefficient of preservation]..." (Durkheim, 1951: 185), because he had been able to show that its size was directly related to such aspects of family life as the presence and number of children. He had also discovered that the sex having the highest coefficient of preservation varied from country to country, and he had related these changes to the different structure of marriage in different countries (Gove, 1972a: 208).

Gove, himself, offers new evidence that appears to support his explanation of the difference between the magnitude of the coefficient of preservation for males and females. He states that

perhaps the most important finding of the studies of mental illness and psychological well-being is that in our society marriage appears to be more advantageous to men than to women, while being single (or divorced, or widowed) is probably more disadvantageous to men than to women.²

Coefficients of preservation calculated for widowed and divorced married and married suicide rates show that being divorced or widowed carries a greater risk of suicide for both sexes than does the married state. (This is a consistent finding of Durkheim (1951), Gove (1972a) and the present study.) However, when Gove (1972a) looked more closely at the coefficients of preservation in question, calculated separately for males and females, he was able to show that

...in both cases [being widowed or divorced] it is the males that have the larger coefficient of preservation with the difference being especially large in the case of the widowed. This strongly suggests that the shift from being married to being divorced and particularly from being married to being widowed has a more negative impact on men than on women...If [the] difference were due to selective factors (more unstable women than unstable men marrying), we would expect more widowed and divorced women as compared with widowed and divorced men to be unstable and certainly we would not expect the coefficient of preservation for these categories to be smaller for women than for men.³

In conclusion, Gove interprets his evidence to suggest that changes may be expected over time in the relationship between the male and female coefficients of preservation. Although the data central to Gove's study originated from the United States Census of 1960, he also calculated similar coefficients of preservation using published and unpublished data from various locations in

the United States concerning suicide *attempts*. The results were consistent with those obtained using Census data on *completed suicides*. In addition, analysis of the most recent suicide data showed the greatest disparity between the men and the women in the relative size of the coefficients of preservation from *attempted* suicide.⁴ Gove suggests that this reflects "a shift in the quality of the marital roles of men and women" (Gove, 1972a: 211). Gove does not explicitly state exactly what he means by the above quotation, except to say that this shift "would be consistent with the analysis of the woman's role discussed [in an earlier section of the paper]" (ibid.).

Gove's analysis of the woman's role centres upon three main points: (1) the low status of the traditional female role in modern society; (2) the unsatisfactory content of that role; and (3) the problems of role conflict encountered by the combination of the traditional and modern roles of women. Gove is apparently implying that over time a changing ideology and praxis concerning sex-roles is developing which intensifies the dissatisfaction and conflict women experience in their roles. With the development of modern society the traditional female domestic role and the tasks performed within it have become devalued, while the increased participation of women in fields other than the domestic brings with it the problems of role conflict.

(iii) The Role of the Adult
Married Female in Modern Society

All of the neo-Durkheimian studies suggest an association between suicide and situations in which the individual experiences frustration and stress. From this perspective, any individual involved in such a situation or event is at increased risk of committing suicide, particularly if his characteristics further predispose him to suicide.⁵ The three themes that emerge from these studies can be reconceptualised in terms of frustration,⁶ changes in self-identity,⁷ and changes in beliefs about the situation.⁸ Suicide is then conceived of as a meaningful response to a subjectively perceived situation.

It may be suggested that these three themes are implicit in the many discussions of the adult female married role that focus on its potential for conflict. Some of these conflicts also exist potentially for single women, but it will be suggested here that the married female is subject to *more* stress than the single female owing to her greater exposure to stressful situations and events, over and above the stressful effects of a devalued status and role.

When we speak of the 'adult female married role' we really mean a "role-set" in the sense that Merton described it (Merton, 1957): that is, a constellation of separate role-relationships that are usually found occurring together as the roles of particular individuals.⁹ It has repeatedly

been suggested (Goode, 1960; Merton, 1957) that (1) each individual has a number of roles to play in life that are compatible to a greater or lesser degree depending upon the demands and obligations of each, (2) all individuals suffer role strain to some extent, and (3) such strain is normal.

As Goode says:

The individual is likely to face a wide, distracting, and sometimes conflicting array of role obligations. If he conforms fully or adequately in one direction, fulfillment will be difficult in another...Role strain - difficulty in meeting given role demands - is therefore normal.¹⁰

Sieber (1974: 567) notes that the concept of role strain actually contains two elements, that of role overload and that of role conflict. Role overload

refers to constraints imposed by time: as role obligations increase, sooner or later a time barrier is confronted that forces the actor to honor some roles at the expense of honoring others.¹¹

Role conflict, on the other hand, occurs when the kind of behaviour demanded by the performance of one role conflicts with, is not appropriate for, or is positively prohibited by, performance of another role.

If we accept the existence of some degree of role strain in the normal course of an individual's life, then it is logical to suppose that mechanisms for the reduction of strain have been developed and are used. Goode (1960) gives

a comprehensive list of these mechanisms, which include isolation, compartmentalisation, reduction, and bargaining.

In summary, all individuals are assumed to suffer some role strain due to the competing demands of their various roles, but that such strain can be reduced by various coping mechanisms. Stress, in the sense used here,¹² is the result of the *failure to cope successfully with such strain*, because routine methods of coping with role strain are not applied or no longer work (see Gross, 1970: 54-56). One of the possible outcomes of stress is suicide.

The above analysis refers to all individuals. However, it is suggested here that some categories of persons are subject to greater role strain than others owing to the requirements of their various roles and the relationship among those roles. If it is accepted that the extent of role strain may vary between different categories, then presumably the risk of stress resulting from a failure to cope with such role strain is increased for the members of those categories subject to higher role strain, and as a possible outcome, more suicides among members of such categories can be predicted.

It is suggested here that married women, and, even more, married and employed women, are likely to experience more stress than are single men and women because they are members of a group that is subject to higher role strain. The diagram below presents a summary listing of those

sources of stress considered intuitively to be important in a discussion of stress generated in the roles of adult males and females as suggested by a review of the literature.

FIGURE 1
 IMPORTANT SOURCES OF STRESS FOR MALES,
 NEVER-MARRIED WORKING FEMALES, HOUSEWIVES,
 AND MARRIED FEMALES GAINFULLY EMPLOYED

Source of Stress	Never-married Working Females ¹³	Housewives	Married Females Gainfully Employed	All Males
1. Lower status of women	X	X	X	-
2. No major alternative source of gratification	X	X	-	-
3. More sources of stress due to role accumulation	-	-	X	X
4. Financial dependency	-	X	-	-
5. Role strain likely (conflict and/or overload)	-	-	X	X
6. Pressure of "success" motive	X	-	-	X

Key: X indicates that the source of stress to which it refers is important for the group under which the X falls.

The lower status of women, listed first, affects all women, regardless of their marital status or whether or not they are employed. Inferior status can be seen as a stressful situation *per se*. It is possible to produce evidence that women are in a disadvantageous position in comparison with men in various important spheres. Such evidence does not make it clear whether women occupy a disadvantaged position in society *because of* their inferior status as a defined group, or whether their lower status results from their disadvantaged positions. Four major status-conferring areas in which women are disadvantaged are education, occupation, position in the law, and politics. Women do not receive as much education as do men;¹⁴ women do not reach the same levels as do men in virtually any occupational field, even if qualifications and experience are held constant (Epstein, 1970; Silver, 1973; Suter & Miller, 1973; Ferber & Loeb, 1973; Ostry, 1968). Women are still disadvantaged in terms of the law in most jurisdictions, although they have experienced great improvement since the nineteenth century when women were chattels in the eyes of the law. Until recently, however, the only legal area in which women were ever advantaged over men was in the awarding of custody of children. Finally, women are grossly under-represented within the political realm. It is possible to argue that women have not taken up the opportunities offered to them, but it does not alter the

fact that female under-representation in the political realm means that women enjoy lesser access to power resources and the increase in status which goes with such access.

Turning now to the second source of stress in Figure 1, the lack of a major alternative source of gratification, it is assumed here that single women and married women who are not employed suffer stress from the relative inflexibility of their situations. The two major sources of gratification in modern society are generally held to be job and family. Single females lack the latter whilst housewives lack the former. These two groups of individuals can be seen as 'single major role' holders. On the other hand, married employed women and all men¹⁵ are 'double role' holders and have access to both sources of gratification. This means that at times when one role is proving problematic for some reason, there exists an alternative source from which gratification can nevertheless be obtained.

The source of stress numbered 3 in Figure 1 is the complement of that discussed immediately above. Those groups having a 'double role', that is, married employed women and all men, are in the position of having more sources of stress. If we follow Goode's (1960) and Merton's (1957) arguments, the more roles a person has to fulfill, the greater is the likelihood of role strain.

Financial dependency, numbered 4 in Figure 1, is a source of stress to which only housewives are subject. It is important because it strikes at the root of a central value in modern society: autonomy, and money is a means of attaining autonomy. Since it is assumed that most housewives have no money of their own and are dependent upon their husbands' income, they cannot attain autonomy, and a possible result is frustration. In addition, modern society ranks occupations in a status hierarchy in part according to their earning power. The role of housewife has no position in that scale of social prestige and value. As Lopata (1971: 139) points out, "...the role [of housewife] is not easily located in the occupational social structure. Most are not even sure it belongs there: it lacks the basic criteria of most jobs." Housewives have no occupational status of their own in spite of the fact that the role of housewife is the only occupational role of many women.

Finally, in modern achievement-oriented society, occupation has become more and more important as a means of evaluating and ranking people. Housewives have an ambiguous status, and so are assigned a rank from the occupation of their husbands. Working wives, on the other hand, can *achieve* their rank from their occupation in the same way as do men, although this may not necessarily be the case. Women who are *only housewives* are thus liable to stress from

two standpoints. Firstly, their rank comes from someone else's achievement in a society which emphasises personal achievement. Secondly, they are dependent upon their husbands in a society that emphasises autonomy and individualism. As Lopata (1971: 140) concludes, after an examination of the role of housewife from the above standpoints:

This state of affairs results in the role's devaluation, conflict with other roles, and psychological strain for performers.

Role conflict, numbered 5 in Figure 1, is a source of stress that has received much attention from theorists (Goode, 1960; Merton, 1957). Role conflict was defined earlier as referring to "discrepant expectations irrespective of time pressures" (Sieber, 1974: 567). The proposition that married, employed women are subject to role conflict between their work-role and the domestic role constellation has been put forward by many authors (Fogarty *et al.*, 1971; Rapoport & Rapoport, 1971; Kelsall *et al.*, 1972). Rapoport & Rapoport (1971) provide evidence, from a sample of married, full-time career women, that such conflicts are felt and that various coping mechanisms are used to reduce the conflicts. Kelsall *et al.* (1972), interpreting the results of a nation-wide questionnaire survey that attempted to contact all graduates of British universities six years after graduation, conclude that the

single most important reason why fully two-thirds of the female respondents were not employed at the time of the survey was because of job-family conflicts. Most of the female graduates who responded to the questionnaire were married and the majority had children. An overwhelming majority cited the problems of combining a job and the demands of a family as their reasons for ceasing to work. Many would have liked to have continued their employment as well as having a family, and a majority intended to return to work in the future when children were older and the demands of family life were not so great.

If married and employed women are to be considered as likely to suffer from role conflict, then the same must be true of men, and in particular, married men. They have the same involvement in the double role of home and work that married and employed women do. Role overload, the other component of role strain, must also characterise both men and women.

Modern western society is achievement-oriented, and, ideally at least, meritocratic. The value placed upon achievement in society is the reciprocal of the success motive in the individual. Primary group relationships are by their nature exempt from such motivations: in families and friendship groups members are valued primarily for themselves rather than for their abilities or achievements. Secondary group relationships, such as those which typify

the work-world, are opposite in emphasis. Therefore, those most involved with the occupational world, single women and all men, will be those most inspired by the success motive, and under most pressure to achieve. Women who are married and employed may be activated by the success motive if they are involved with a career, but as they are expected to maintain a primary orientation towards their familial role, the *pressure* to succeed in the occupational world is much less. Married women who are employed in a non-career capacity are less likely to be impelled by the success motive, less likely to be expected to achieve in the occupational world, and more likely to view working as a purely instrumental adjunct to their familial role.

In summary, Figure 1 suggests, firstly, that on the basis of the indicators intuitively chosen from an analysis of the literature, married women as a group do not appear likely to suffer more stress than either men or single women. However, married and employed women score in both categories 3 and 5, which refer to more sources of stress due to role accumulation and the likelihood of role strain respectively.¹⁶ These two sources may be more stressful than the other categories because these two items are different in implication from the others: the lower status of women, no major alternative source of gratification, financial dependency, and the pressure of the success motive. These latter may be viewed as referring to *states*;

their existence is given, a fact of life, and predictable by the individual as she leads her daily life. For example, the lower status of women as compared with men is something into which an individual is born. Although this lower status can be seen as a source of stress, it is something about which one has always known and to which one can learn to adjust. In contrast, the increased stress because of role accumulation and role strain can be expected to manifest itself in the form of *events*. In other words, the effects of being subject to more sources of stress through having a greater number of roles to fulfill, and the effects of role strain, are more likely to be recurring, unpredictable demands on women, especially when children are concerned.

A married, working woman who has children does not know *when* domestic emergencies will take place or *what form* they will take. It is suggested that because of this uncertainty, the stresses that manifest themselves as events are potentially more stressful than are states.

Married and employed women score in both the 'events' categories of Figure 1 as described above; housewives score in neither.

Further, the majority of the theoretical discussions of roles (Goode, 1960; Merton, 1957; Gross *et al.*, 1958) indicate role strain to be not only an important, but also an inevitable, result of role accumulation. If

they are correct, we would expect married and employed women to experience more stress than housewives as a result of role strain. Such theories are harmonious with the findings of Gove, upon which this work is based.

Footnotes

¹Gove, 1972a: 206.

²Ibid.

³Ibid.: 208.

⁴The data referred to here were collected by R. McCaslin in an unpublished study of suicide attempts and threats in Nashville, Tennessee. Data was collected on suicide attempts between Oct. 1967 and Jan. 1969, and on suicide threats between Mar. 1968 and Mar. 1969, using a variety of sources. cf. Gove, 1972a: 210.

⁵There is a large literature, particularly on the level of the psychological analysis of suicide, that deals with this question. Perhaps the most important single characteristic has been found to be *depression*, especially in the clinical sense. This is interesting, since it seems logical that one of the effects of a stressful situation would be depression. It could be argued that at least some of those, if not all, committing suicide are suffering from reactive depression. However, the causal link is not clear. Sainsbury (1968) says that social isolation and socially isolating events are conspicuously associated with suicide:

There is evidence that these social variables noted above also affect the incidence of suicide in people with a depressive illness; but it is not yet possible to say whether they predispose the depressed psychotic to suicide or whether they precipitate the psychosis which culminates in suicide. (Sainsbury, 1968: 6)

As far as the present study is concerned, of course, psychological factors distinguishing suicides from non-suicides in each group are considered to be intervening variables.

⁶For example, studies of the business cycle point to changes in the amount of frustration experienced as a result of changes in their circumstances and those of other people. cf. Henry & Short, 1954.

⁷For example, the studies of social mobility that point to the importance of drastic changes in an individual's self-esteem and his perception of himself. cf. Gibbs & Porterfield, 1960; Breed, 1963.

⁸ Almost all the neo-Durkheimian studies stress the importance of the individual's subjective perception of either his situation or of himself in his situation. For example, the early American ecological studies suggest that suicide is a response to the perception of life as no longer having any meaning, cf. Schmidt, 1928.

⁹ I am using Linton's classic definition of role as a sociological concept:

A *status*, in the abstract, is a position in a particular pattern....A *role* represents the dynamic aspect of a status. The individual is socially assigned to a status and occupies it with relation to other statuses. When he puts the rights and duties which constitute the status into effect, he is performing a role....the term role is used with a double significance. Every individual has a series of roles deriving from the various patterns in which he participates and at the same time a *role*, general, which represents the sum total of these roles and determines what he does for his society and what he can expect from it. (Linton, 1971: 92-3)

An idea of the function of role within society was given by Turner:

...it provides a comprehensive *pattern* for behaviour and attitudes; it constitutes a *strategy* for coping with a recurrent type of situation; it is socially identified, more or less clearly, as an entity; it is subject to being played recognisably by different individuals; and it supplies a major basis for *identifying* and *placing* persons in society. (Turner, 1968: 552)

¹⁰ Goode, 1960: 485.

¹¹ Sieber, 1974: 567.

¹² See *Introduction*, p. 2, for a definition of stress. The concept of stress is here viewed as an emotional experience which is regarded as an intervening variable. The definition adopted here is not the same as the definition of stress as used in the physical sciences. However, stress has been defined and used differently as a concept within the social sciences by many different authors. For a summary of these and the different definitions of stress, see Scott & Howard, 1970: 265.

- ¹³This classification ignores the residual category of never-married females who do not work. The information presented in Figure 1 is not intended to be exhaustive and merely attempts to give an overall impression.
- ¹⁴See the Census figures on education for any modern western country for confirmation.
- ¹⁵As noted in fn. 13 above, Figure 1 deals with "modal" categories rather than attempting to account for all subsets of the categories of persons listed. Never-married males are as much a residual category (except for a very narrow age-range) as are never-married females who do not work. The "modal" condition for men is to be both married and working.
- ¹⁶Men, too, score in both categories 3 and 5 of Figure 1, and so we need to ask how men differ from married, employed women in terms of the likelihood of experiencing stress. Firstly, the group of men comprises both single and married males; single males are less subject to stress from sources numbered 3 and 5 than married men. Secondly, the problems of role conflict and role overload are not as likely to result in stress for married men as they are for married, employed women because solutions to stressful events are more likely to be prescribed. The combination of marriage and employment for a woman is still a recent phenomenon, and prescribed solutions for the resolution of role strain between home, and especially the child-rearing aspects, and work have not been developed.

CHAPTER III

METHOD

Research Design

Aims of the study

There are two aims of this study: firstly, to replicate Gove's analysis of the relationship among sex, marital status and suicide as fully as possible using Canadian statistics; secondly, to test the proposition that an added variable, employment, will influence the relationship between marital status and suicide for women. Within this broad framework, Canada will be contrasted with the United States by comparing the results of this study with those of Gove. In addition findings for all Canada will be compared with those for British Columbia.

Hypotheses

Replication of Gove's work leads to the following propositions and hypotheses:

- P1 That females are less protected against suicide by marriage than are males, owing to the nature of the adult female sex role.

The above proposition will be tested by the following hypothesis:

H1 That in Canada the coefficient of preservation as calculated by the $\frac{\text{never married suicide rate}}{\text{married suicide rate}}$ will be smaller for females than for males, that is, that the suicide rates of single and married women will more nearly approach parity than will those of single and married men.

P2 That over time the discrepancy between the degree of protection afforded by marriage for males and females will increase, owing to the shifting nature of adult sex roles in modern society (see page 13 for Gove's argument on this point).

The above proposition will be tested by the following hypothesis:

H2 That the discrepancy between the coefficients of preservation calculated as in H1 for males and females in Canada in 1951 will not be as great as the discrepancy between the same coefficients in 1971.

P3 That the shift from being married to being widowed or divorced has a more negative impact upon males than upon females, owing to the disadvantageous nature of the adult female sex role.

The above proposition will be tested by the following hypothesis:

H3 That in Canada the coefficient of preservation as calculated by the $\frac{\text{widowed and divorced suicide rate}}{\text{married suicide rate}}$ will be smaller for females than for males, that is, that the suicide rates of widowed/divorced and married women will more nearly approach parity than will those of widowed/divorced and married men.

The discussions in pages 13 to 25 above lead to the following propositions:

P4a That married and employed females will enjoy a lesser degree of protection against suicide than married females who are not employed.

The above proposition will be tested by the following hypothesis:

H4a That the coefficient of preservation as calculated by the $\frac{\text{employed suicide rate}}{\text{not employed suicide rate}}$ for married women in British Columbia in 1961 will be greater than 1.0000.

P4b That married and employed females will enjoy a lesser degree of protection against suicide than single and employed females.

It is impossible to test the last proposition noted (P4b) properly, because it is not possible to obtain a population breakdown in 1961 British Columbia Census data by employment status, marital status and age simultaneously. Therefore it is not possible to calculate age specific coefficients of preservation, which are essential in this case.

Data and methodological considerations

Data used to test the hypotheses outlined above originated from three sources: firstly, Canadian Census reports for the years 1951, 1961, and 1971 of suicide by sex, age and marital status and of population similarly broken down; secondly, British Columbia Division of Vital Statistics data for 1960, 1961 and 1962 on suicide by sex, age, marital status and occupation; and thirdly, data reported by Gove (1972a) for the United States, 1960.

Several problems were encountered in testing the hypotheses using the above data sources. Firstly, the Canadian Census does not record suicide by occupation. British Columbia is the only province which does so, and even so the Division of Vital Statistics does not normally tabulate such data. Special runs were made available to the author by L. W. Hole of the Division of Vital Statistics at Victoria. The lack of such data at the national level means that it is not possible to be sure

whether or not British Columbia differs significantly from Canada as a whole in terms of suicide by occupation.

Secondly, the problem of small cells hampered analysis. As a consequence of the necessity of using provincial data outlined above, the infrequency of the numerical incidence of suicide within the population became an insoluble problem. The fact that certain population breakdowns (see page 32) are not available prevent calculation of coefficients of preservation that could give the best results in terms of reliability of interpretation. On the other hand, had such breakdowns been available, many empty cells and small frequencies would have resulted. Further, smaller incidences of suicide in the earlier years have made provincial-dominion comparison impossible.

Thirdly, the age-cohorts used by Gove (1972a) in his analysis do not correspond with those available in the Canadian data. Thus in the comparison of Canadian and American coefficients of preservation, it was necessary to combine the results of Gove's five-year age-groups into an average which could then be compared with the wider Canadian age categories.¹

In addition, the general problems encountered by all studies which use suicide statistics are of course applicable to the present study.²

It is important when interpreting the meaning of

the coefficients of preservation, particularly when dealing with comparisons of data from different sources, to refer to the suicide rates and population data involved.

Differences observed between two coefficients calculated for a larger age-range than that normally used in Census data for one category of persons may find their source almost entirely in a small sub-section of that age-range.

Statistical tests of significance have not been used in this study because the study base is populations, not samples. Any differences that emerge are real differences and not due to sampling error. The question of what observed differences are *meaningful* is dealt with by determining a simple ratio measure between the two coefficients of preservation that we wish to compare. This ratio provides a way of hierarchising the results in order to give greater prominence to more striking differences rather than to less striking ones. In other words, the ratio measure gives all findings the same base line.

An arbitrary level of statistical "meaningfulness" was created by deciding that any difference occurring between two indices in which Index A is larger than Index B by a ratio of 0.5 or more, or, in other words, where A is bigger by half as much again as B, shall be called a *meaningful* difference.

Footnotes

¹Gove's (1972a) study calculated coefficients of preservation for "all ages 15+" in addition to the age specific coefficients, which covered the age range 15-65 yrs. However, in this study, reference will not be made to the "all ages 15+" coefficients of preservation (with two exceptions: the reason for each will be explained below) for a very simple reason: they do not tell us anything of value. The coefficients of preservation in this case merely result from a 'lumping together' of all suicides and the total population. This means they also include all the sources of bias inherent in the population structure. To take a simple example, the coefficient of preservation calculated for never married females and married females from the British Columbia data, 1971, show us how misleading such figures can be. The figure for "all ages 15+" is 0.9180. Yet none of the age specific coefficients in the same category fall below 1.000. However, Table X (xii) in Appendix A shows that the coefficient is being depressed due to the lower rate of suicide amongst the never-married 15-24 yr. olds, who form the bulk of those who have not yet married, whilst the bulk of the married population is concentrated amongst the 25-64 yr. olds, who have a higher suicide rate simply as a function of age. Thus coefficients of preservation calculated from composite age groups confound marital status with age.

The "all ages 15+" figures are not even reliable for use when comparing Canada with the United States, since we have no guarantee that the population structures of the two countries are the same. (This, however, could be checked, although we would still be left with the effects of population structure bias for both countries considered separately, as demonstrated above.)

²The methodological problems involved in the use of suicide statistics are not a new revelation, but they have been almost ignored until recent years in the sociological study of suicide (see Wilkins (1967); Wilkins (1970) for a comprehensive discussion of some of the problems).

Virtually all sociological studies of suicide have used official statistics, which are subject to the validity problem pointed out by Wilkins. Furthermore, as Cicourel & Kitsuse (1963: 8) have observed, official statistics are compiled by "persons other than sociologists for purposes other than scientific research." The way people approach a subject and the uses to which information is to be put

often has a profound influence upon the very nature of the information collected. It is not that sociologists have a more objective perspective upon suicide than do those officials whose job it is to provide the statistics, but their perspectives and interests are different, and these differences are reflected in the statistics themselves. Atkinson (1971: 87-96) recognises the underlying validity problem involved in using suicide statistics, but he adds to this the problem of reliability. In other words, he raises a second question, which asks whether the categories, valid or not, are consistently applied by those who maintain the death registers.

The use of suicide statistics implies that sociologists have confidence in their validity and reliability, but the acceptance of official statistics has been based on common-sense assumptions rather than on scientific investigations. Although the question of the official classification procedures is referred to more often by researchers than the question of the validity of the categories, it is an easier problem to resolve.

In summary the use of suicide statistics presents the general problems of validity and reliability, the first potentially more serious than the second.

In an attempt to resolve the reliability problem, we can simultaneously consider all deaths in terms of whether they resulted from suicide or not and whether they were correctly classified as such.

<u>A</u>	<u>B</u>
Actual suicides classified as such.	Non-suicidal deaths classified as suicides.
<u>C</u>	<u>D</u>
Actual suicides not classified as such.	Non-suicidal deaths not classified as suicides.

Cells A and D in the diagram above do not present any problem: both are correctly classified. All errors, whether from incorrect or inconsistent classification by officials, occur in cells B and C. There is no way of knowing the magnitude of the numbers in these cells from suicide statistics and thus no way of estimating the degree of error. It might be possible to calculate the size of the error in cell B by a careful examination of all

available evidence on each death classified as a suicide, but there is no way to estimate the size of the error in cell C, since not all deaths are investigated, and consequently no records of any details are available. A prospective study would solve the problem, but it would be expensive and would also involve difficult ethical considerations.

Even if it were possible to estimate the extent of error in cells B and C, we would still not know for each new population of suicides *which* ones were erroneously classified, and therefore there would be no way of knowing whether the distribution of the variables that might be under investigation for their relationship to the propensity to commit suicide had been influenced by the error.

Given that such errors do exist, not all authors agree that they jeopardise results to a significant extent. Gibbs put it this way:

In using official statistics to test theories, *absolute* reliability is not the issue. Rather, the crucial question is interpopulation *variation* in *relative* reliability (the proportion of actual suicides reported as such). (Gibbs, 1968: 202)

In other words, error is not a significant problem per se, if, when comparing one population with another, it can be ascertained that the degree and kind of error involved do not differ significantly. Sainsbury (1968) has provided evidence from his English studies that errors within official statistics are random. He agrees with Gibbs:

For suicide statistics to be useful, the absolute rate is not required; some constant proportion of it is enough... (Sainsbury, 1968: 3)

The present study utilises official statistics from Canada, and it also makes comparisons with results drawn from a study using official statistics from the United States. Although there is no doubt that errors of validity and reliability exist in these data, there is no reason to believe that these errors differ between the populations studied. Furthermore, within Canada, it is assumed here that errors of reliability between male and female suicide statistics are no different in British Columbia from the other nine provinces of Canada, and that figures produced by Statistics Canada do not differ in reliability from

those of the United States Census.

We now turn to the potentially more serious problem of the validity of suicide statistics. This problem has been attacked in detail by Douglas who argues that the meaning of the word suicide differs substantially, not only between groups of observers but within them. Consequently, different official statistics cannot be comparable:

The profusion and complexity of different definitions of suicide...indicates that 'suicide' is an *essentially problematic conception*: that is, 'suicide' is not a socially meaningful linguistic category that is *either* applied rightly *or* wrongly to any given instance of social action; rather, it is a category with different (abstract) meanings that can rightfully *either* be applied *or not* applied to certain types of actions. Whether or not the category is actually imputed in a given situation is dependent on factors that are partially independent of the meanings of the term itself. Most especially, whether or not the category is imputed in a given situation is dependent upon the *argument process* that takes place between the participants in the situation.
(Douglas, 1971: 134)

Douglas concludes that no work on suicide in the Durkheimian tradition has any way of determining and analysing social meanings in terms of real-world events that can be objectively replicated because they have denied all epistemological value to such forms of data (Douglas, 1971: 132). Criticisms levelled at Douglas since 1968 have generally centred on his neglect of empirical justification for his claims.

In interpreting the results of this present study, as with all studies, it is as well to bear in mind that epistemological questions such as those brought up by Douglas are unanswered. However, it would be unjustifiable to cease all investigation into suicidal behaviour on such grounds.

CHAPTER IV

FINDINGS AND INTERPRETATION

It will be recalled that the coefficient of preservation is a ratio measure which is obtained by dividing one suicide rate by another, the resulting figure revealing a relationship between two suicide rates such that *the bigger the coefficient, the more the preservation of the group used as denominator.*

- (i) H1: That in Canada the coefficient of preservation as calculated by the $\frac{\text{never married suicide rate}}{\text{married suicide rate}}$ will be smaller for females than for males.

Tables I, II and III below show that H1 is supported for all years and age-cohorts with the exception of the 15-24 age-cohort in 1961, a deviation that will be discussed later.

TABLE I
SEX, MARITAL STATUS AND SUICIDE: COEFFICIENTS OF
PRESERVATION FOR MALES AND FEMALES, $\frac{\text{never married}}{\text{married}}$,
BY AGE AND MARITAL STATUS, CANADA, 1951

	Ages			Average for ages 25-64	Ages 65+
	15-24	25-44	45-64		
Males: $\frac{\text{nmsr}}{\text{msr}}$	0.9594	1.9474	2.8036	2.3755	2.4742
Females: $\frac{\text{nmsr}}{\text{msr}}$	0.7543	1.5059	1.1657	1.3358	1.4696

TABLE II
SEX, MARITAL STATUS AND SUICIDE: COEFFICIENTS OF
PRESERVATION FOR MALES AND FEMALES, $\frac{\text{never married}}{\text{married}}$,
BY AGE AND MARITAL STATUS, CANADA, 1961

	Ages			Average for ages 25-64	Ages 65+
	15-24	25-44	45-64		
Males: $\frac{\text{nmsr}}{\text{msr}}$	1.0447	2.4562	2.2267	2.3460	2.9780
Females: $\frac{\text{nmsr}}{\text{msr}}$	1.4073	2.1322	1.6427	1.8875	1.4486

TABLE III
 SEX, MARITAL STATUS AND SUICIDE: COEFFICIENTS OF
 PRESERVATION FOR MALES AND FEMALES, $\frac{\text{never married}}{\text{married}}$
 BY AGE AND MARITAL STATUS, CANADA, 1971

	Ages			Average for ages 25-64	Ages 65+
	15-24	25-44	45-64		
Males: $\frac{\text{nmsr}}{\text{msr}}$	1.7025	2.7072	1.9757	2.3415	2.4102
Females: $\frac{\text{nmsr}}{\text{msr}}$	0.9967	1.8147	1.4103	1.6125	0.9787

Key: nmsr = never married suicide rate.
 msr = married suicide rate.

N.B.: A coefficient for "all ages 15+" is not given in any tables. See Footnote 2, p. 35.

Women are less protected by marriage from suicide than are men for each age-cohort (with the proviso noted above). The degree of protection for women is least in the 15-24 age-cohorts of 1951 and 1971, where Durkheim's prediction is reversed and women are better off single than married in terms of protection against suicide. The reason for this is not because married women aged 15-24 have a much higher suicide rate than married women in other age-cohorts, but because single women aged 15-24 are at a low risk of suicide in comparison with single women in other age-cohorts. The Population Statistics and Suicide Rates Tables in Appendix A show that in 1951 and 1971 the suicide rates of single women aged 15-24 were below those of married women in the

same age-cohort, which is reflected in the coefficients of preservation in Tables I and III. For all other age-cohorts, the suicide rates of single women were higher than those of married women. The reversal of the pattern described above is a function of the different finding for women aged 15-24 in the 1961 data, shown in Table II. In this case, although the suicide rate of married women increased substantially, the suicide rate of single women increased even more so that it was higher than the married rate rather than lower.

In the population for which the relationship between sex, marital status and suicide is most salient - those aged 25-64 -, H1 is supported without exception. The ratios between the coefficients (see p. 23) show differences that appear to be meaningful:

For ages 25-64: in 1951, the male C of P is 0.7x
 higher than the female C of P
 in 1961, the male C of P is 0.3x
 higher than the female C of P
 in 1971, the male C of P is 0.5x
 higher than the female C of P

Key: C of P = coefficient of preservation.

x = "times".

The above demonstrates the kind of finding for which we are looking. It indicates that in the age-cohort where marriage represents maximum social conformity and

perhaps the greatest personal rewards for both sexes, there is still a meaningful difference between the male and female coefficients of preservation.

- (ii) H2: That the discrepancy between the coefficients of preservation calculated as in H1 for males and females in Canada in 1951 will not be as great as the discrepancy between the same in 1971.

(a) General Findings

Tables I, II, and III (see pp. 40-41) show that this hypothesis is not supported. Gove proposed that "if the role explanation is correct, it would seem also to follow that the suicide rate of women would be increasing relative to the men's rate" (Gove, 1972a: 206). Figures from the United States show that between 1952/3 and 1962/3 the suicide rate of white women increased by 49% whilst the suicide rate of white men increased by 10% (Gove, *ibid.*). (The figures for non-whites show the same trend.)

Gove goes on to show that in other western industrial societies, including Canada, for which figures are available, the same pattern occurs over the same period. He says:

In all these countries [for which data has been made available], including the United States, this disparity can be attributed to changes in the rates that occurred

after the age at which most people are married. These data thus tend to support the role analysis.¹

Nevertheless, our data do not support Gove. If the Canadian suicide rates of all males and females aged 15 and over are compared, then the male suicide rate has increased by 64% over the period 1951 to 1971.² The female suicide rate has increased by only 56%. Using data for the 25-64 age-cohort only in order to eliminate the worst effects of population bias, the male suicide rate increased by 66% as compared with an increase in the female suicide rate of only 52%, over the period 1951 to 1971. These last figures given are thus in direct conflict with Gove.

(b) Findings for the 15-24 age-cohort

Firstly, within the 15-24 age-cohort, men have moved in a consistent direction towards greater protection from suicide by marriage, with a ratio increase over 1951 to 1971 of 0.78. In 1951 the male married suicide rate was just slightly higher than the suicide rate for single males. In 1971 the position was reversed: the suicide rate for married men was twice as high as it was in 1951, but the suicide rate for single men was more than three times as high as in 1951 (see Appendix A).

The figures shown in Tables I, II and III show

that the coefficients of preservation for Canadian females aged 15-24 are not very different in 1951 and 1971. Both sets of figures indicate that women aged 15-24 are protected from committing suicide by remaining single, as has already been noted. In 1961, however, not only was this pattern reversed, but it was reversed considerably, so that women in this age-cohort followed Durkheim's prediction: they were protected from suicide by marriage, and to a greater degree than were men in the same age-cohort.

Comparing the coefficients of preservation for males and females within the age-cohort 15-24, we find:

in 1951, the male C of P is 0.3x higher than the
female C of P

in 1961, the female C of P is 0.4x higher than
the male C of P

in 1971, the male C of P is 0.7x higher than the
female C of P

Key: C of P = coefficient of preservation.

x = "times"

Over 1951-1971 the difference increases, and to a meaningful level. Yet it is difficult to interpret because of the 1961 reversal. Furthermore, the increased ratio difference is largely because of the increased gap in 1971 between the single and the married male suicide rates, rather than any change in

the relationship between the suicide rates for single and married females, which remains stable (see Appendix A).

(c) Findings for the 25-44 age-cohort

Within the age-cohort 25-44 years, men display the same trend as men in the 15-24 age-cohort, which is towards greater protection from suicide by marriage over the period 1951-1971, although the ratio increase is only 0.4. In all years they are more protected than the 15-24 age-cohort. This is so because although in all years the suicide rate for married men increases in this age-cohort over the rate for those aged 15-24, the suicide rate for males who are single increases by a much larger increment (see Appendix A). Thus it appears that it is being single that has a negative effect, rather than marriage having a positive effect, in terms of protection against suicide.

For women in the 25-44 age-cohort, the same U-shaped pattern found in the 15-24 age-cohort reappears over the period 1951-1971, with the difference that in the 25-44 age-cohort women *are* protected from suicide by marriage in all years. Nevertheless, they are protected to a lesser degree than are the men in this age-cohort, as hypothesised in H1. The increase in the coefficient of preservation for 1961, which

creates the U-shape, is caused by an increase in the suicide rate for single women, whereas the suicide rate for married women remained stable from 1951-1961. Over the period 1951-1971, there has been a slight increase in the value of the coefficient of preservation, caused by the fact that the suicide rate for single females has increased somewhat more than the suicide rate for married females (see Appendix A).

Comparing men with women in the 25-44 age-cohort, we find that women are still "worse off" than are men in terms of the protection afforded by marriage against suicide. The difference reaches a meaningful level in 1971:

in 1951, the male C of P is 0.3x higher than the
female C of P

in 1961, the male C of P is 0.2x higher than the
female C of P

in 1971, the male C of P is 0.5x higher than the
female C of P

Key: C of P = coefficient of preservation

x = "times"

(d) Findings for the 45-64 age-cohort

Within the age-cohort 45-64, there is a consistent trend towards decreased protection from suicide by marriage for men: there was a ratio decrease of 0.4

over the period 1951-1971. The decrease in protection has largely been brought about by an increase of almost 50% in the suicide rate of married men. The suicide rate of single men aged 45-64 increased only slightly over this 20 year period. The reasons for this change are beyond the scope of this study.

For women aged 45-64 years, the familiar U-shaped pattern reappears. Marriage provides this age-group with more protection from suicide than those aged 15-24, but less protection than those aged 25-44. In this case, the increase in the coefficient of preservation for 1961, creating the U-shape, is virtually all due to a *decrease* in the suicide rate for married women since 1951, whereas the suicide rate of single women changed imperceptibly (see Appendix A). However, over the 20 year period, there has been a slight increase in the degree of protection afforded by marriage to females in this age-cohort caused by the fact that over 1951 to 1971, the suicide rate of single women increased by a ratio of 0.6, whilst the suicide rate of married women increased by only 0.3 (see Appendix A).

Comparing the coefficients of preservation for females with those of males for the 45-64 age-cohort, the women are less protected from suicide by marriage

than are the men. The gap between the coefficients remains stable over 1961-1971, but has narrowed considerably over the 20 year period as a whole, because of the simultaneous decrease in the value of the coefficient for males and increase for females:

in 1951, the male C of P is 1.4x higher than the female C of P

in 1961, the male C of P is 0.4x higher than the female C of P

in 1971, the male C of P is 0.4x higher than the female C of P

Key: C of P = coefficient of preservation

x = "times"

(e) The U-shape pattern

The U-shape pattern is a feature of the distribution over the 20 year period of the three coefficients of preservation calculated for females by the never married suicide rate / married suicide rate. The phenomenon of increased protection against suicide by marriage for women in 1961 cannot be accounted for by shifts in the base population. If we consolidate all age-cohorts 25-64 and then re-examine them, we find that the U-shape can be explained by the small fluctuations between 1951 and 1961 of the suicide rate of married women. For the 25-44 age-cohort the suicide rate of

married women remained stable; for the 45-64 age-cohort it actually decreased. It is possible that in 1961 there was something about marriage and family life that was more conforming and rewarding than in 1951 and 1971. In 1951, the increase in the number of divorces that is generally attributed to rushed war-time marriages and long separations during the years of World War II had not yet subsided. Unsatisfactory marriages can thus be seen as more likely during this period.

Following this, the affluence and quiescence of the nineteen-fifties lasted for more than a decade. By 1961 the general social upheavals of the 1960's had not yet been felt. Nothing had been yet heard from the women's liberation movement. It has been suggested that the majority of Americans were committed to a concept of marriage and the family that was couched in terms of traditional sex-roles during the period.³ If these were their desires and expectations, and if this is what society expected and rewarded, then it follows that we would expect women to be most satisfied in having achieved them. Thus the smaller difference between the coefficients of preservation for males and females in the age-cohorts 25-44 and 45-64 in 1961 as compared with 1951 and 1971 can be interpreted as owing to the increased protection of women from suicide

by marriage for the reasons suggested above rather than a decrease in the protection afforded to men.

As far as the coefficients of preservation for women aged 15-24 are concerned, the picture is somewhat different from that illustrated above for other age-cohorts as the suicide rates given in the tables in Appendix A show. The suicide rate of married women aged 15-24 *did* increase substantially over 1951 to 1961, by a ratio of 3.8. However, the suicide rate of single women increased by a ratio of 7.8. Thus the suicide rate of single women was much higher than the rate of married women. The explanation of the sharp rise in the suicide rate of single women aged 15-24 over the period 1951 to 1961 possibly lies in the prevailing values of the 1950's and early 1960's as noted earlier, which encouraged marriage even amongst the young. Being single was more likely to be experienced as stressful during that decade, and hence might be expected to lead to an increase in the suicide rate.⁴ The explanation of the rise in the suicide rate of married women aged 15-24 over the same period might be attributed to unfulfilled expectations concerning marriage.

(f) Conclusion

We must conclude from this study that Gove's

(1972a) theory and findings concerning the trend of relative protection from suicide over time are not supported here. However, there is a slight increase in the degree of difference between the male and female coefficients of preservation over the 20 year period as a whole for the age-cohorts 15-24 and 25-44, in spite of the reversal of the pattern in 1961, which created the U-shape pattern over time. It is not possible to say at the present time what will happen to the curvilinear relationship displayed so far, and thus it is possible, if 1961 proves after analysis of future data to be a freak year, that Gove's theory and findings may yet be supported by a future study.

It is important to point out that the lack of support for H2 does not necessarily contradict the support given to H1. The findings suggest that more complicated processes are at work than H2 had supposed.

- (iii) H3: That in Canada the coefficient of preservation as calculated by the
$$\frac{\text{widowed and divorced suicide rate}}{\text{married suicide rate}}$$
 will be smaller for females and for males.

(a) General findings

H3, if upheld, would provide a crucial support for the role-theory explanation of the difference between the coefficients of preservation for men and women.

Separate data for the widowed and the divorced was not available for Canada; but this does not seriously hamper the testing of the hypothesis since both categories display the same pattern in Gove's (1972a) study. Data from 1961 and 1971 are used in the following analysis.

TABLE IV
SEX, MARITAL STATUS AND SUICIDE: COEFFICIENTS OF
PRESERVATION FOR MALES AND FEMALES,
WIDOWED/DIVORCED AND MARRIED, AGE SPECIFICS,
CANADA, 1961.

	Age group			Average for ages 25-64	Ages 65+
	15-24	25-44	45-64		
Males: $\frac{w/d\ sr}{msr}$	E	7.8248	2.6010	5.2129	2.1188
Females: $\frac{w/d\ sr}{msr}$	3.8072	2.7890	1.7474	2.2682	1.0301

TABLE V
SEX, MARITAL STATUS AND SUICIDE: COEFFICIENTS OF
PRESERVATION FOR MALES AND FEMALES,
WIDOWED/DIVORCED AND MARRIED, AGE SPECIFICS,
CANADA, 1971.

	Age group			Average for ages 25-64	Ages 65+
	15-24	25-44	45-64		
Males: $\frac{w/d\ sr}{msr}$	1.7370	4.5859	2.6122	3.5991	2.004
Females: $\frac{w/d\ sr}{msr}$	2.3993	3.9952	2.2500	3.1226	0.8331

Key: w/d sr = widowed and divorced suicide rate
msr = married suicide rate
E = empty cell

N.B. Figures for 1951 are unavailable due to inadequate data.

As predicted, the value of the coefficient of preservation is much higher when the numerator is the widowed and divorced than it is when the numerator is the never-married, for both sexes and at all ages. In other words, being widowed or divorced carries a much higher risk of suicide than being either married or single.

H3 is supported by the data presented in Tables IV and V above. Being married as opposed to being widowed or divorced is much more protective for men than for women in terms of suicide risk: widowed and

divorced men are a higher suicide risk than are women in the same position. There is one exception to this in the data: women aged 15-24 in the 1971 data (Table V) are a greater suicide risk than are men in the same age-cohort. Unfortunately, it is not possible to ascertain whether this reversal of the expected pattern is significant or not. In the first place, it is not possible to calculate a coefficient of preservation for males aged 15-24 in the 1961 data since there were no suicides reported for that category in 1961. Thus it is not possible to make a comparison of different sets of data. Secondly, the number of suicides in this age-cohort for both men and women are too few to allow any degree of reliability. All that can be said in explanation of the reversal of the predicted pattern for the 15-24 age-cohort refers to the suicide rates of the four groups which make up the two coefficients of preservation for this age-cohort (see Appendix A). The suicide rates indicate that marriage has a much more positive impact upon men than upon women amongst those aged 15-24 in terms of protection against suicide. However, being widowed or divorced has a *much* more negative impact upon women than upon men in this youthful group. The male widowed and divorced suicide rate for the 15-24 age-cohort is very similar to

the suicide rate for single males (18.8/100,000 and 19.2/100,000 respectively). For women, the widowed and divorced suicide rate is much higher than the suicide rates of either the single or the married.

(b) Differences in the findings over time

The strength of the support given to Gove by the data presented in Tables IV and V differs depending upon which Census year is used. The 1971 data (Table V) support H3 for all age-cohorts except the 15-24 age-cohort, as noted above. Nevertheless, the differences between the male and female coefficients of preservation for the age-cohorts 25-44 and 45-64 are not that great. For these age-cohorts, the male coefficient of preservation is only 0.2x higher than that for females. The difference is thus not meaningful as defined by this study. Yet, if we turn to the 1961 data shown in Table IV, we find that the picture was more pronounced:

1961, ages 25-44: the male C of P is 1.8x higher
than the female C of P

ages 45-64: the male C of P is 0.5x higher
than the female C of P

average for
ages 25-64: the male C of P is 1.2x higher
than the female C of P

Key: C of P = coefficient of preservation
x = "times"

Not only are the 1961 figures meaningfully different from the 1971 figures, but they are also meaningful in themselves. Gove's 1961 figures show that for the population with which we are most concerned, those aged 25-64 years, the male coefficient is 0.7x higher than the coefficient for females (Gove, 1972a: 207). Had this present study used 1961 data exclusively, Gove's findings would have been more decisively confirmed. Unfortunately, data needed to calculate age specific coefficients of preservation for widowed and divorced as compared with married people for Canada in 1951 are not available. Therefore, it is impossible to tell whether the results of the 1961 data are another manifestation of the U-shape pattern present in all the data for females in 1961.

(c) Differences in the findings
by age-cohort

A further pattern revealed in Table V is that the difference between the coefficients of males and females who are aged 65 and over is much larger than that of the younger age-cohorts. Looking back to the suicide rates (see Appendix A), in 1971 the rate for married women aged 65 and over is actually *higher* than the rate for widowed and divorced women in the same age-cohort, whereas the corresponding figures for men

display the same pattern as predicted in H3, albeit modified.

Suicide rates for all Canada, for both sexes and all marital statuses, are in most categories lower in the over 65 age-cohorts⁵ after reaching a peak in the age-cohort 45-64. After the age of 65, divorce and widowhood do not appear to be as traumatic as they would have been at an earlier stage of life. Widowhood is a much more likely occurrence than divorce for this age-cohort. It is likely that by this time people are psychologically better prepared for widowhood.

The finding that women who are widowed or divorced have a lower suicide rate than do men in the same position is not difficult to interpret. Most women have more affiliations than do men because they usually "maintain the system" in the sense of keeping in touch with friends and relatives. (Schneider & Smith, 1973; Firth *et al.*, 1970). It seems likely that women mediate kinship relationships for men and are more able to reconstitute primary group memberships after widowhood or divorce. In addition, it is much easier for an elderly female to be given a "useful" role within the kinship system of modern societies than for the elderly male.

Finally, the finding that the suicide rate of widowed and divorced women aged 65 and over is lower

than the corresponding rate for those married requires interpretation. It suggests that the unattached older woman has fewer stresses than the married older woman and this may well be related to the problems encountered by married couples upon the husband's retirement. It may be that there is a "phase-appropriate" condition for which institutional supports exist. It is more likely that a woman aged over 65 will be widowed, that is, in an "other than married" category, rather than married. Thus widowhood is in this case a phase-appropriate condition.

- (iv) H4a: That the coefficient of preservation as calculated by the $\frac{\text{employed suicide rate}}{\text{not employed suicide rate}}$ for married women in British Columbia in 1961 will be greater than 1.0000⁶.

(a) General findings

As the most recent Census year data available were for 1961, and as 1961 appears different from 1951 and 1971 (see the results for H2, pp. 43-52), results must be used with caution. However, the numbers of suicides for the years 1960, 1961, and 1962 for women in British Columbia do not differ substantially, being 36, 38 and 31 respectively. Furthermore, the distribution of those suicides within the different marital status categories does not differ over the three years.⁷

In testing H4a, it has been necessary to make use of the "all ages 15+" category in computing the coefficient. It was not possible to calculate the age-specific coefficients since population breakdowns by employment status, marital status and age simultaneously are not available in the 1961 Census. Furthermore, because of small numbers, tests could only be made with consolidated age-groups. As age is related to suicide and to employment this test is inadequate. Nevertheless, the coefficient of preservation, as calculated by the $\frac{\text{employed}}{\text{not employed}}$ suicide rate for married women in British Columbia, all ages 15+, is 0.1265⁸. This very small figure suggests that the beneficial aspects of employment for married women outweigh any disadvantageous ones. However, we should be wary of placing a great deal of trust in the figure quoted above since it is calculated from the very population which encompasses most bias. In spite of this, by controlling marital status and employment we are controlling for age to some extent: the bulk of the population under discussion will fall between 20 and 60 years of age, since it is during these years that women are most likely to be married *and* employed at the same time.

If we do not hold marital status constant, and merely calculate the same coefficient for all British Columbian women, the numbers are larger and age can be controlled.

TABLE VI
 COEFFICIENTS OF PRESERVATION FOR BRITISH
 COLUMBIAN WOMEN, EMPLOYED AND NOT EMPLOYED, 1961

	All ages 15+	25-64 yrs.
Females: $\frac{\text{employed sr}}{\text{not employed sr}}$	0.5723	0.4400

Key: sr = suicide rate

Table VI illustrates that the coefficient of preservation first calculated, for married women only, is supported by the coefficient calculated for all women. Further, when we eliminate the two extreme ends of the age continuum, which are those which would contribute most bias to the results, the trend is intensified. It should be emphasised that these findings are only tentative, and that all that can be said with certainty is that H4a is not supported.

It is not possible to control both for age and marital status because a breakdown of the female labour force in British Columbia by these variables is not available for 1961 data. Nevertheless, Table VII below controls for marital status using "all ages 15+", and combining this with the figures shown in Table VI we might conclude that the group of married, employed women enjoys a protection from suicide not enjoyed by the group of married women who are not employed.

TABLE VII
 EMPLOYMENT STATUS AND SUICIDES OF FEMALES BY
 MARITAL STATUS, BRITISH COLUMBIA, 1961,
 All ages 15+ (No. & %)

Status	Single				Married			
	Female popn.		suicides		Female popn.		suicides	
	No.	%	No.	%	No.	%	No.	%
Employed	49,627	50.8	4	66.7	89,723	23.3	1	3.7
Not employed	48,130	49.2	2	33.3	295,214	76.7	26	96.3
Total	97,757	100	6	100	384,937	100	27	100

Status	Widowed				Divorced			
	Female popn.		suicides		Female popn.		suicides	
	No.	%	No.	%	No.	%	No.	%
Employed	12,036	19.5	1	25.0	4,476	69.5	1	100
Not employed	49,725	80.5	3	75.0	1,967	30.5	0	0
Total	61,761	100	4	100	6,443	100	1	100

No calculation of coefficients of preservation for the data shown in Table VII has been made because of the small numbers involved. However, the raw data suggests that single, widowed and divorced women who are employed are disproportionately *more* likely to commit suicide. Conversely, those not employed in the same groups are disproportionately less likely to commit suicide. This pattern is the reverse of that

clearly shown for married women, since they commit suicide disproportionately *less* if they *are employed*.⁹

(b) Discussion

Table VII suggests that these findings can be related to Durkheim's (1951) theory that marriage for men, who presumably all work, increases integration and protects against marriage. Apparently, adding a work role to marriage has produced the same protection for women. Both marriage *and* work are necessary, but are neither in themselves sufficient, for protection against suicide. Overall, the findings of both this study and Gove (1972a) do not contradict the statement that when women have a central role in a family they commit suicide less, since although the coefficients of preservation shown in Tables I, II and III (see p.40-41) demonstrate clear differences in the degree of protection against suicide by sex, in almost all cases the value of the coefficient is greater than 1.000. This indicates that marriage provides at least some degree of protection against suicide as compared with being single.

Table VII suggests that the degree of protection against suicide is enhanced for women if they are both married and employed. On the other hand, having a job cannot replace the benefits of marriage by itself in

protecting women against suicide. Thus we may conclude that maximum protection comes from an *interaction* between home and work. (It should be remembered that this is an *overall* pattern and may not be true for *all* women.)

The above explanation is not the only one which can be suggested. Perhaps it is more difficult to be a non-participator in a world that values participation than it is to have to deal with the problems that the demands of two major roles, home and work, create, and thus housewives, as non-participators in one of the most *valued* spheres of life, that is, the occupational world, are under stress. Clason (1974) has suggested that employment for married women influences attitudes towards traditional sex-roles more than has been hitherto supposed. Married women who work may indeed be the source of modern ideas about sex-roles, and if these ideas prevail, married women who are not employed are more likely to face stress not only from relative economic deprivation, but also from fulfilling a role that is increasingly considered to be a necessary but not sufficient part of a full role complement. This conclusion is fortified by Sieber (1974) who has pointed out that the majority of role theory has been biased in favour of the negative effects of role accumulation, that is, role overload and role conflict.

Sieber suggests that the beneficial effects of role accumulation at least balance, and possibly outweigh, the negative effects. He lists four types of positive outcomes of role accumulation: role privileges, overall status security, resources for status enhancement and role performance, and enrichment of the personality (Sieber, 1974: 569). It has been noted earlier, in Ch.II of this thesis, that the reason Durkheim (1951) postulated for marriage affording protection against suicide was chiefly related to the greater number of *affiliations* amongst the married as compared with the single, widowed and divorced. It is possible that being married and employed offers an even greater number of affiliations than being married but not employed. Durkheim's explanation is consonant both with Sieber's analysis of the benefits of role accumulation and also with an explanation of the results of this study in terms of maximum protection against suicide resulting from an interaction between home and work.

In addition, the results of the testing of H1, which refers to the greater degree of protection from suicide by marriage afforded to men than to women, taken together with those of H4a, suggest that the analysis of sources of stress to which men and women are subject as a result of their roles in adult life

(as outlined in Ch.II) is to some extent incorrect. P4a predicted that married and employed women would suffer more stress than women married but not employed. This proposition, tested by H4a, was not only not supported, but the data indicate that the reverse may be the case (see pp. 59-63). We must now entertain the assumption that the support given to H1 results from the possibility that it is married women who are not employed rather than married women who are employed who are contributing to the lower value of the coefficient of preservation for married women as a whole when compared with married men (see Tables I, II and III on p. 40-41).

Yet, in Figure 1 (p.17), all groups were indicated as suffering equally from the same number of sources of stress. It was then argued that "events" are more stressful than "states" and since married and employed women scored in both categories of "events" stress whereas housewives scored in neither, then married and employed women rather than housewives should be under more stress as a result of their role. It now appears that the interpretation of the impact of "events" and "states" is wrong, or housewives are subject to sources of stress that have not been identified, or that the rewards of role accumulation with its attendant integration outweigh the stress engendered, or all of these things.

Footnotes

¹Gove, 1972a: 206.

²The use of "all ages 15+" figures here needs explanation, since it was shown earlier (Fn. 1: page 35), that such figures incorporate too much bias. In this case, their use was unavoidable for two reasons:

- 1) The comparable figures calculated by Gove also used "all ages 15+" figures;
- 2) The figures for the 25-64 age-cohort had to be in part estimated. Age specific suicide rates are not available for the widowed and divorced in 1951 data. The estimate was arrived at by computing the proportion of those widowed and divorced suicides aged 25-64 within the total number of 1971 widowed and divorced suicides, and then subtracting the same proportion from the total number of 1951 widowed and divorced suicides.

Therefore, the "all ages 15+" figures were used as a support for the 25-64 yrs. figures, in that the latter showed only an intensification of the former.

³Canadians never reached the same high rate of marriage as did the Americans; however, the trend in Canada was parallel to that of the United States.

⁴I would suggest that the quiescent 1950's had a different effect upon women than upon men because of the value placed on marriage. Firstly, the stigma of being single has always been applied differentially to women over men. Secondly, the traditional domestically-oriented female sex-role was reinterpreted in terms of the reverence given to marriage and family life during the period. Women were socialised into a belief that their primary goal was marriage and a family, and that their rightful place was within the domestic arena (Christensen & Swihart, 1956; Empey, 1958; Glenn, 1959). Though marriage and family life were important to men also, they nevertheless were not totally dependent upon them as a measure of personal success and self-worth in life, and neither were men seen as 'failures' if they remained single.

⁵The exceptions are: (i) Married males, Canada, 1951
(ii) Single females, Canada, 1951
(iii) Single males, Canada, 1961

(iv) Single males, British Columbia,
1971

See Tables (i) - (xii) in Appendix A.

⁶The distribution of suicides in British Columbia does not differ from the Canadian distribution of suicides (see Appendix B). Neither do the rates of employment of women differ substantially between Canada and British Columbia (being, overall, 29.7% and 28.3% respectively).

⁷Source: Department of Health Services and Hospital Insurance, Division of Vital Statistics, Victoria, B.C.

$$\begin{array}{l} \text{Formula: } \frac{100,000}{89,723} \times 1 \\ \frac{100,000}{295,214} \times 26 \end{array} = \frac{1.1145}{8.8072} = 0.1265$$

⁹When the occupations of the women committing suicide are examined, we find that in 1960 5 women who committed suicide had been employed; in 1961, 7; and in 1962 again 5, for a total of 17 over the three years. Of these, 5 were nurses (graduate and practical) and 3 were office clerks. Of the rest, 4 were classified as falling into managerial or professional categories, and the remaining 5 into other occupational categories (source: as in Fn. 7 above). The occupations of office clerk and nurse were further examined. In 1961, in British Columbia, 9.5% of the total labour force (female) were employed as office clerks, yet 28.8% of employed women committing suicide were office clerks. In 1961 nurses accounted for 7.5% of the female labour force in British Columbia, while 28.6% of employed women committing suicide were nurses. All the suicides of the office clerks were committed by single women. (Unfortunately, the marital status of all clerks is not available.) Half of the suicides of nurses were committed by single women and half by married women. Although these numbers are too small to provide a basis for even tentative conclusions, further investigation of the possibility that certain kinds of job situations generate more stress than others seems wise, especially as it has been shown that some types of jobs are more stressful than others (see Labovitz & Hagedorn, 1971).

CHAPTER V

CONCLUSION

This study was designed to replicate the work of Gove (1972a), using Canadian data, and to extend Gove's study to include the influence of employment status upon suicide rates.

In summary, the results have supported a major proposition concerning the differential risk of suicide between married men and women, first discovered by Durkheim (1951) and recently supported in Gove's (1972a) study: that women are less protected from suicide by marriage than are men. The age-specific coefficients calculated in this study indicate a three-stage pattern for women, in which, as far as protection against suicide is concerned, very young women (15-24 years) are better off single, young and middle-aged women (25-64 years) are better off married, and older women (aged 65 and over) are better off single, widowed or divorced.

Gove's (1972a) finding of an increasing differential between the coefficients of preservation for men and women over time is not replicated. The relationship between the suicide rates and the shifting balance between adult

roles appears to be more complex than Gove's figures suggest. A U-shaped pattern was ubiquitously evident in the distribution of female Canadian suicides over time, suggesting that if changes in the difference between the value of the coefficients for men and women are caused by shifts in the quality of adult roles, the relationship is more unstable and vacillating than had been assumed by Gove. Furthermore, there may be important differences between cultures and societies.

Gove's (1972a) finding that the difference between the suicide rates of widowed and divorced women and married women is less than the difference between the corresponding male figures is substantiated, but the finding is not as clear-cut in the 1971 data as in the 1961 data. This finding tends to support Gove's interpretation of the differences found in the degree of protection afforded by marriage against suicide for men and women in terms of differences in the stress of adult roles.

The hypothesis that a larger proportion of married women who work will commit suicide than of married women who do not work is not upheld. Evidence reported here suggests that the reverse of this prediction is true. Married employed women appear to be more protected from suicide than are married women who are not employed. This finding throws at least some doubt on the role theory explanation underlying both the above hypothesis and the

others tested in this study.

Alternative explanations of the results of this study which appear more viable are therefore suggested. Firstly, it may be that the accumulation of valued roles protects against suicide. This explanation takes us back to Durkheim's original explanation of protection against suicide in terms of *integration*. If affiliations are a measure of integration into society, then the greater the number of affiliations, the more the protection against suicide. Thus married and working women, like married and working men, have a greater number of valued affiliations and are protected against suicide to a greater degree than are housewives. The explanation above also points to the *benefits* of role accumulation as opposed to its negative effects, in favour of which role theory has tended to lean in the past.

Secondly, the results of this study fit an explanation in terms of the interaction between home and work roles as providing maximum protection against suicide for women. Both roles are necessary but not sufficient as protectors against suicide. Future research might thus test the proposition that maximum protection against suicide for women occurs when the role of housewife is combined with a work role.

In conclusion, the findings show that the theory of suicide upon which the hypotheses were based is not

adequate to explain the results. Other variables beyond marital status, age, and employment status are needed in both the theory and the research.

BIBLIOGRAPHY

- Almquist, E. M. & S. S. Angrist, 1970, "Career Salience and Atypicality of Occupational Choice among College Women", *Journal of Marriage & the Family*, Vol. 32, No. 2 (May): 242-249.
- Angrist, S. S., 1972, "Changes in Women's Work Aspirations during College (or, Work does not equal Career)", *International Journal of Sociology of the Family*, Vol. 2, No. 1 (Mar.): 87-97.
- Arnott, C. C., 1972, "Husbands' Attitude and Wives' Commitment to Employment", *Journal of Marriage & the Family*, Vol. 34, No. 4 (Nov.): 673-684.
- Arnott, C. C. & V. L. Bengston, 1970, "Only a Homemaker': distributive justice and role choice among married women", *Sociology & Social Research*, Vol. 54, No. 4 (Jul.): 495-507.
- Atkinson, J. M., 1971, "Suicide Statistics", pp. 87-96 in A. Giddens (ed.), *The Sociology of Suicide*, London: Frank Cass & Co.
- Axelsson, L. J., 1963, "The Marital Adjustment and Marital Role Definitions of Husbands of working and non-working Wives", *Marriage & Family Living*, Vol. 25, No. 2 (May): 189-195.
- Blood, R. O., Jr. & R. L. Hamblin, 1958, "The Effect of the Wife's Employment on the Family Power Structure", *Social Forces*, Vol. 36, No. 4 (May): 347-352.
- Blood, R. O., Jr. & M. Wolfe, 1961, *Husbands and Wives*, Chicago, Ill.: Glencoe Free Press.
- Bock, E. W. & I. L. Webber, 1972, "Suicide Among the Elderly: Isolating Widowhood and Mitigating Alternatives", *Journal of Marriage & the Family*, Vol. 34, No. 1 (Feb.): 24-31.
- Breed, W., 1963, "Occupational Mobility and Suicide", *American Sociological Review*, Vol. 28: 179-188.

- British Columbia. Department of Health Services and Hospital Insurance, 1972, *Vital Statistics, Ninety-ninth Report for the year 1970*, Victoria: Queen's Printer.
- Canada. Dominion Bureau of Statistics, 1951 Census of Canada, Vol. II, *Population*, Ottawa: Queen's Printer.
- Canada. Dominion Bureau of Statistics, 1961 Census of Canada, Vol. I, Part 3, *Population*, Ottawa: Queen's Printer.
- Canada. Dominion Bureau of Statistics, 1961 Census of Canada, Series 3.1, Vol. III, Part 1, *Labour Force*, Ottawa: Queen's Printer.
- Canada, Statistics Canada, 1971 Census of Canada, Vol. 1, Part 4, *Population*, Ottawa: Information Canada.
- Canada, Statistics Canada, n.d., *Deaths, Suicide, by Sex, by Marital Status and Age, Canada, Newfoundland - British Columbia, 1951*, Unpublished table.
- Canada, Statistics Canada, n.d., *Deaths, by Cause and Sex, by Marital Status & Age, Canada, 1961*, Unpublished table.
- Canada, Statistics Canada, n.d., *Deaths, Suicides, by Sex, by Marital Status and Age, Canada, Newfoundland - British Columbia, 1971*, Unpublished table.
- Centers, R. et al., 1971, "Conjugal Power Structure: a re-examination", *American Sociological Review*, Vol. 36 (Apr.): 264-278.
- Christensen, J. H. & M. H. Swihart, 1956, "Postgraduation role preferences of senior women in college", *Marriage & Family Living*, Vol. 18, No. 1 (Feb.): 52-57.
- Cicourel, A. & J. Kitsuse, 1963, *The Educational Decision-makers*, Indianapolis: Bobbs-Merrill.
- Clason, C. E., 1974, "Variables Influencing the Attitude of Married Women toward the Existing Sex-role Differentiation" Paper presented at the VIII World Congress of the International Sociological Association, Toronto.
- Croog, S. H., 1970, "The Family as a Source of Stress", in S. Levine & N. A. Scotch (eds.), *Social Stress*, Chicago: Aldine.

- Douglas, J. D., 1971, "The Sociological Analysis of the Social Meanings of Suicide", Ch. 11, pp. 121-151 in A. Giddens (ed.), *The Sociology of Suicide*, London: Frank Cass & Co. Ltd.
- Durkheim, E., 1951, *Suicide*, New York: Free Press.
- Empey, L. T., 1958, "Role Expectations of Young Women Regarding Marriage and a Career", *Marriage & Family Living*, Vol. 20, No. 2 (May): 152-155.
- Epstein, C. F., 1970, *Woman's Place*, Berkeley, Cal.: University of California Press.
- Epstein, C. F., & A. L. Bronzaft, 1972, "Female Freshmen View their Roles as Women", *Journal of Marriage & the Family*, Vol. 34, No. 4 (Nov.): 671-672.
- Ferber, M. A. & J. W. Loeb, 1973, "Performance, rewards and perceptions of sex discrimination among male and female faculty", *American Journal of Sociology*, Vol. 78, No. 4, (Jan.): 995-1002.
- Firth, R. W. et al., 1970, *Families and their relatives*, London: Routledge & Kegan Paul.
- Fogarty, M. P., R. N. Rapoport & R. Rapoport, 1971, *Sex, Career & Family*, London: Allen & Unwin.
- Frantzen, B., 1969, "Influence du travail professionnel de la femme sur la famille", *Revue de l'Institut de Sociologie (Solvay)*, Vol. 2: 227-262.
- Gabrielson, I. W. et al., 1970, "Suicide Attempts in a population pregnant as teenagers", *American Journal of Public Health*, Vol. 60, No. 12 (Dec.): 2289-2301.
- Gavron, H., 1966, *The Captive Wife: conflicts of housebound mothers*, London: Routledge & Kegan Paul.
- Gianopoulos, A. & H. E. Mitchell, 1957, "Marital Disagreement in Working Wife Marriages as a function of the Husband's Attitude towards the Wife's Employment", *Marriage & Family Living*, Vol. 19, No. 4 (Nov.): 373-378.
- Gibbs, J., 1968, Review of J. Douglas' *The Social Meanings of Suicide* in *American Journal of Sociology*, Vol. 74 (Sep.): 201-204.
- Gibbs, J. P. & A. L. Porterfield, 1960, "Occupational Prestige and Social Mobility of Suicides in New Zealand", *American Journal of Sociology*, Vol. 66: 147-152.

- Giffen, P. J., 1965, "Rates of Crime and Delinquency", in W. T. McGrath (ed.), *Crime and its Treatment in Canada*, Toronto: Macmillan & Co.
- Glenn, H. M., 1959, "Attitudes of Women Regarding the Gainful Employment of Married Women", *Journal of Home Economics*, Vol. 51 (Apr.): 247-252.
- Goode, W. J., 1960, "A Theory of Role Strain", *American Sociological Review*, Vol. 25, No. 4: 483-496.
- Gove, W. R., 1972a, "Sex, Marital Status & Suicide", *Journal of Health & Social Behaviour*, Vol. 13 (Jun.): 204-213.
- _____, 1972b, "The relationship between sex roles, marital status and mental illness", *Social Forces*, Vol. 51, No. 1 (Sep.): 34-43.
- Gove, W. R. & J. F. Tudor, 1973, "Adult sex roles and mental illness", *American Journal of Sociology*, Vol. 78, No. 4: 812-831.
- Gover, D. A., 1963, "Socio-economic differential in the relationship between marital adjustment and wife's employment status", *Marriage & Family Living*, Vol. 25, No. 4 (Nov.): 452-456.
- Greer, G., 1971, *The Female Eunuch*, London: Paladin.
- Gross, E., 1970, "Work, organisation and stress" in S. Levine & N. A. Scotch (eds.), *Social Stress*, Chicago: Aldine.
- Gross, N., W. Mason & A. McEarchern, 1958, *Explorations in Role Analysis*, New York: Wiley.
- Gurin, G., J. Veroff & S. Feld, 1960, *Americans View Their Mental Health*, Joint Commission on Mental Illness and Health, Monograph Series No. 4, New York: Basic Books Inc.
- Hall, D. T., 1972, "A model of coping with role conflict: the role behaviour of college-educated women", *Administrative Sciences Quarterly*, Vol. 17, No. 4 (Dec.): 471-486.
- Henry, A. F. & J. F. Short, 1954, *Suicide & Homicide*, Glencoe, Ill.: Free Press.
- Hoffman, L. W., 1960, "Parental power relations and the division of household tasks", *Marriage & Family Living*, Vol. 22 (Feb.): 27-35.

- Horner, M., 1972, "The motive to avoid success and changing aspirations of college women" in J. M. Bardwick (ed.), *Readings on the Psychology of Women*, New York: Harper & Row.
- Huber, J. (ed.), 1973, *Changing Women in a Changing Society*, Special Edition of the *American Journal of Sociology*, Vol. 78, No. 4 (Jan.).
- Jeffrys, M., 1952, "Married women in the higher grades of the Civil Service and government-sponsored research organisations", *British Journal of Sociology*, Vol. 3: 361-364.
- Kahn, R. L. et al, *Organisational Stress*, New York: Wiley.
- Kelsall, R. K., A Poole & A. Kuhn, 1972, *Graduates: The Sociology of an Elite*, London: Methuen.
- Killian, L. M., 1952, "The significance of multiple-group memberships in a disaster", *American Journal of Sociology*, Vol. 57: 309-314.
- Komarovsky, M., 1946, "Cultural Contraditions and sex-roles", *American Journal of Sociology*, Vol. 52 (Nov.): 182-189.
- Labovitz, S. & R. Hagedorn, 1971, "An analysis of suicide rates among occupational categories", *Sociological Inquiry*, Vol. 41, No. 1, Winter: 67-72.
- Lester, D., 1972, *Why People Kill Themselves*, Springfield, Ill.: Thomas.
- Levy, B., 1972, "The school's role in the sex-role stereotyping of girls: a feminist review of the literature", *Feminist Studies*, Vol. 1, No. 1 (Summer): 5-23.
- Lewis, G., 1972, "Role Differentiation", *American Sociological Review*, Vol. 31 (Aug.): 424-434.
- Linton, R., 1972, "On Status and Role", pp. 90-97 in M. Truzzi (ed.), *Sociology: The Classic Statements*, New York: Random House.
- Lopata, H. Z., 1971, *Occupation: Housewife*, New York: Oxford University Press.
- Merton, R. K., 1957, *Social Theory and Social Structure*, Glencoe, Ill.: Free Press.

- Mitchell, J., 1971, *Women's Estate*, Harmondsworth, G.B.: Penguin Books Ltd.
- Nix, H. L. & F. L. Bates, 1962, "Occupational role stresses: a structural approach", *Rural Sociology*, Vol. 27, No. 1 (Mar.): 7-17.
- Nye, F. I., 1961, "Maternal Employment and Marital Interaction: some contingent conditions", *Social Forces*, Vol. 40, No. 2 (Dec.): 113-119.
- Oakley, A., 1972, *Sex, Gender and Society*, London: Temple Smith.
- Oppenheimer, V. K., 1973, "Demographic influence on female employment and the status of women", *American Journal of Sociology*, Vol. 78, No. 4 (Jan.): 946-961.
- Orden, S. R. & N. M. Bradburn, 1969, "Working wives and marriage happiness", *American Journal of Sociology*, Vol. 74, No. 4 (Jan.): 392-407.
- Ostry, S., 1968, *The Female Worker in Canada, 1961 Census Monograph*, Dominion Bureau of Statistics, Ottawa: Queen's Printer.
- Ovenstone, I. M. K. & N. Kreitman, 1974, "Two Syndromes of Suicide", *British Journal of Psychiatry*, Vol. 124: 336-345.
- Poloma, M. M. & T. N. Garland, 1971-2, "On the Social Construction of Reality: reported husband-wife differences", *Sociological Focus*, Vol. 5, No. 2 (Winter): 40-54.
- Psathas, G., 1968, "Toward a Theory of Occupational Choice for Women", *Sociology & Social Research*, Vol. 52, No. 2 (Jan.): 253-269.
- Rapoport, R. N. & R. Rapoport, 1971, *Dual-Career Families*, Harmondsworth, England: Penguin Books Ltd.
- Royal Commission on the Status of Women in Canada, 1970, *Report*, Ottawa, Information Canada.
- Sainsbury, P., 1968, *Suicide and Depression*, Special Publication No. 2, "Recent Developments in Affective Disorders", Royal Medico-Psychological Association.
- Schmidt, C., 1928, *Suicide in Seattle 1914-1925: an ecological and behaviouristic study*, Seattle: University of Washington Press.

- Schneider, D. M. & R. T. Smith, 1973, *Class differences and sex roles in American kinship & family structure*, Englewood Cliffs, N.J.: Prentice-Hall.
- Scott, R. & A. Howard, 1970, "Models of Stress" in S. Levine & N. A. Scotch (eds.), *Social Stress*, Chicago: Aldine.
- Sieber, S. D., 1974, "Toward a Theory of Role Accumulation", *American Sociological Review*, Vol. 39, No. 4 (Aug.): 567-578.
- Shuval, J. T., 1963, "Occupational Interests and sex-role congruence", *Human Relations*, Vol. 16, No. 2 (May): 171-182.
- Silver, C. B., 1973, "Salon, Foyer, Bureau: Women and the professions in France", *American Journal of Sociology*, Vol. 78, No. 4 (Jan.): 836-851.
- Simpson, R. L. & I. H. Simpson, 1961, "Occupational choice among career-oriented college women", *Marriage & Family Living*, Vol. 23, No. 4 (Nov.): 337-383.
- Suter, L. E. & H. P. Miller, 1973, "Income differences between men and career women", *American Journal of Sociology*, Vol. 78, No. 4 (Jan.): 962-974.
- Taylor, P. H., 1964, "Role and role conflicts in a group of middle-class wives and mothers", *Sociological Review*, Vol. 12, No. 3 (Nov.): 317-327.
- Thompson, B. & A. Finlayson, 1963, "Married women who work in early motherhood", *British Journal of Sociology*, Vol. 14, No. 2 (Jun.): 150-168.
- Turner, R. H., 1968, "Role: Sociological Aspects" in D. L. Sills (ed.), *The International Encyclopaedia of the Social Sciences*, New York: Cromwell, Collier & Macmillan Inc.
- Uesugi, T. K. & W. E. Vinacke, 1963, "Strategy in a feminine game", *Sociometry*, Vol. 26, No. 1 (Mar.): 75-88.
- Vinacke, W. E., 1959, "Sex roles in a three person game", *Sociometry*, Vol. 22 (Dec.): 343-360.
- Wiley, M. G., 1973, "Sex roles in games", *Sociometry*, Vol. 36, No. 4 (Dec.): 526-541.

Wilkins, J. L., 1967, "Suicidal behaviour", *American Sociological Review*, Vol. 32: 286-298.

Wilkins, J. L., 1970, "Producing suicides", *American Behavioural Scientist*, Vol. 14, No. 2 (Nov.-Dec.): 185-202.

APPENDIX A

POPULATION STATISTICS AND SUICIDE RATES

CANADA AND BRITISH COLUMBIA:

TABLE VIII

(i) - (xii)

Key: Pop = population
S.R. = suicide rate per 100,000 population
S = single
M = married
W & D = widowed and divorced
N/A = suicide rates are unable to be calculated
due to lack of age specific data. The
corresponding population cells are left
blank since in such cases the population
figures serve no purpose.
E = empty cell

(i) POPULATION STATISTICS AND SUICIDE RATES:

MALES, CANADA, 1951

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	1,579,351	927,045	428,727	158,740	64,839
	S.R.	16.8	5.4	23.6	52.3	47.8
M	Pop.	3,141,754	142,309	1,190,357	1,066,985	362,245
	S.R.	13.4	5.6	12.1	18.7	19.3
W & D	Pop.	199,710				
	S.R.	39.6	N/A	N/A	N/A	N/A

(ii) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, CANADA, 1951

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	1,242,437	751,465	306,475	128,748	55,749
	S.R.	4.0	1.9	5.2	10.1	12.6
M	Pop.	3,119,824	323,923	1,673,012	900,505	222,384
	S.R.	5.2	2.5	3.5	8.7	8.5
W & D	Pop.	475,636				
	S.R.	6.9	N/A	N/A	N/A	N/A

(iii) POPULATION STATISTICS AND SUICIDE RATES:

MALES, BRITISH COLUMBIA, 1951

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	123,738	63,712	31,625	17,556	10,855
	S.R.	40.4	11.0	56.9	91.1	82.9
M	Pop.	297,452	11,418	138,483	101,255	46,296
	S.R.	21.5	8.8	12.3	33.6	25.9
W & D	Pop.	20,751				
	S.R.	48.2	N/A	N/A	N/A	N/A

(iv) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, BRITISH COLUMBIA, 1951

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	80,533	48,641	20,636	7,474	3,782
	S.R.	6.2	8.2	4.9	E	E
M	Pop.	289,321	26,001	152,436	84,070	26,814
	S.R.	9.7	E	7.2	16.7	11.2
W & D	Pop.	49,018				
	S.R.	10.2	N/A	N/A	N/A	N/A

(v) POPULATION STATISTICS AND SUICIDE RATES:

MALES, CANADA, 1961

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	1,811,473	1,127,732	436,472	174,783	72,486
	S.R.	17.9	61.2	28.9	49.2	59.3
M	Pop.	4,019,725	187,816	1,904,347	1,375,721	461,841
	S.R.	15.7	58.6	11.7	22.1	19.9
W & D	Pop.	221,604	626	18,553	62,635	139,790
	S.R.	50.5	E	91.6	57.5	42.2

(vi) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, CANADA, 1961

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	1,379,733	883,442	266,692	156,709	72,890
	S.R.	4.1	17.0	7.5	10.2	6.9
M	Pop.	4,004,579	414,412	2,103,958	1,190,565	295,644
	S.R.	4.2	12.1	3.5	6.2	4.7
W & D	Pop.	609,211	2,177	50,970	202,561	348,503
	S.R.	7.4	45.9	9.8	10.9	4.9

(vii) POPULATION STATISTICS AND SUICIDE RATES:

MALES, BRITISH COLUMBIA, 1961

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	153,212	88,816	37,096	16,570	10,730
	S.R.	31.3	10.1	37.7	84.5	102.5
M	Pop.	390,024	16,544	180,722	135,211	57,547
	S.R.	20.8	6.0	15.5	27.4	26.1
W & D	Pop.	25,805	124	2,659	6,911	16,111
	S.R.	81.4	E	112.8	57.9	86.9

(viii) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, BRITISH COLUMBIA, 1961

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	97,757	64,685	18,038	9,920	5,114
	S.R.	5.1	3.1	11.1	10.1	E
M	Pop.	384,937	37,367	193,242	118,422	35,906
	S.R.	6.8	E	4.1	13.5	5.6
W & D	Pop.	68,204	347	6,325	47,964	40,208
	S.R.	7.3	\$	\$	20.9	10.0

(ix) POPULATION STATISTICS AND SUICIDE RATES:

MALES, CANADA, 1971

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	2,377,645	1,693,645	419,570	181,445	82,895
	S.R.	27.8	18.8	49.6	54.6	44.6
M	Pop.	4,888,760	317,350	2,282,585	1,727,255	561,570
	S.R.	21.2	11.0	18.3	27.6	18.5
W & D	Pop.	265,480	5,220	45,250	77,625	137,395
	S.R.	55.0	19.2	84.0	72.1	37.1

(x) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, CANADA, 1971

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	1,913,025	1,374,290	267,375	168,630	102,740
	S.R.	7.2	4.3	14.6	16.0	7.8
M	Pop.	4,888,845	603,585	2,313,970	1,594,240	377,055
	S.R.	8.7	4.3	8.0	11.4	8.0
W & D	Pop.	853,655	9,675	87,190	274,030	482,775
	S.R.	15.4	10.3	32.1	25.5	6.6

(xi) POPULATION STATISTICS AND SUICIDE RATES:

MALES, BRITISH COLUMBIA, 1971

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	229,650	161,750	41,420	16,255	10,210
	S.R.	36.6	21.0	50.7	98.4	107.7
M	Pop.	523,045	33,450	234,505	186,125	68,975
	S.R.	22.6	12.0	23.0	31.2	30.5
W & D	Pop.	36,375	715	8,035	11,275	43,145
	S.R.	96.2	E	87.1	97.6	27.8

(xii) POPULATION STATISTICS AND SUICIDE RATES:

FEMALES, BRITISH COLUMBIA, 1971

Marital Status		Ages				
		All 15+	15-24	25-44	45-64	65+
S	Pop.	163,810	124,230	20,365	11,740	7,480
	S.R.	13.4	9.7	19.6	34.1	26.7
M	Pop.	519,475	64,615	232,514	177,380	44,980
	S.R.	14.6	9.3	13.8	17.5	15.6
W & D	Pop.	102,285	1,515	12,020	31,745	56,990
	S.R.	31.3	E	58.2	59.9	10.5

APPENDIX B

ADDITIONAL FINDINGS

1. Differences between All Canada and
British Columbia

The distribution of suicides in British Columbia in 1971 does not differ from the Canadian distribution. Suicide rates in British Columbia are in general higher than those for all Canada, but the relationship between the never-married and married suicide rates remains the same. The degree of the differences between men and women in the British Columbia coefficients is almost exactly the same in those for all Canada, as shown in Table IX.

TABLE IX

COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE NEVER MARRIED AND THE MARRIED BETWEEN ALL CANADA AND BRITISH COLUMBIA, AVERAGE FOR AGES 25-64, 1951, 1961 & 1971

	1951		1961		1971	
	All Canada	B.C.	All Canada	B.C.	All Canada	B.C.
Males: $\frac{\text{nmsr}}{\text{msr}}$	2.3755	3.6753	2.3460	2.7618	2.3415	2.6803
Females: $\frac{\text{nmsr}}{\text{msr}}$	1.3358	N/A*	1.8875	1.7122	1.6125	1.6884

Key: nmsr = never married suicide rate
msr = married suicide rate

*Not available since one of the age-cohorts which makes up this average was in this case an empty cell.

Table X shows that although widowed and divorced British Columbian women are *less* protected than widowed and divorced men as compared with the respective married populations, the ratio difference is only 0.1. In other words, although the British Columbian pattern is the reverse of the Canadian pattern, the difference is not significant.

TABLE X

COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE WIDOWED/DIVORCED AND THE MARRIED BETWEEN ALL CANADA AND BRITISH COLUMBIA, AVERAGE FOR AGES 25-64, AND AGES 65+, 1971

	Average for ages 25-64		Ages 65+	
	All Canada	B.C.	All Canada	B.C.
Males: $\frac{w/dsr}{msr}$	3.5991	3.4571	2.004	0.9135
Females: $\frac{w/dsr}{msr}$	3.1226	3.8282	0.8331	0.6765

Key: w/dsr = widowed and divorced suicide rate
msr = married suicide rate

When the ratio between the coefficients of preservation of men and women is examined it is found that among those aged 65 and over, comparing widowed and divorced with married persons, the difference between the male and female figures is 0.4, much smaller than the difference of 1.4 for the same age group in Canada as a whole. The difference is in the expected direction, males showing a higher coefficient of preservation than females. The

deficit in the ratio difference for British Columbia is almost totally caused by a sharp reduction in the degree of protection against suicide by marriage as compared with being widowed or divorced for men. If this difference is not a function of chance, it may be related to some beneficial effect upon elderly widowed and divorced men, such as that the more well-to-do people are said to retire to British Columbia from the rest of Canada. This supposition cannot, unfortunately, be checked at present since Census data on the subject is not available.

2. Canada compared with the United States

TABLE XI

COMPARISON OF COEFFICIENTS OF PRESERVATION FOR THE NEVER MARRIED AND THE WIDOWED/DIVORCED AS COMPARED WITH THE MARRIED BETWEEN CANADA AND THE UNITED STATES BY AGE, 1961

	Ages						Average for ages 25-64	
	15-24		25-44		45-64		Canada	U.S.
	Canada	U.S.	Canada	U.S.	Canada	U.S.		
Males:								
$\frac{nmsr}{msr}$	1.0447	N/A	2.4652	2.515*	2.2267	1.689*	2.3460	1.973
Females:								
$\frac{nmsr}{msr}$	1.4073	N/A	2.1322	1.816*	1.6427	1.123*	1.8875	1.470
Males:								
$\frac{w/dsr}{msr}$	E	N/A	7.8248	5.912*†	2.6010	3.165*†	5.2129	4.539
Females:								
$\frac{w/dsr}{msr}$	3.8072	N/A	2.7890	3.178*†	1.7474	2.023*†	2.2682	2.605

Key: nmsr = never married suicide rate
msr = married suicide rate
w/dsr = widowed and divorced suicide rate
* = Averages from Gove's (1972a) results for
5 yr. age cohorts
† = Averages from Gove's (1972a) separate
results for the widowed and divorced
E = Empty cell

Table XI indicates that Canada and the United States exhibit the same general patterns, with some specific differences in the degree of the relationships. In the age-cohort 25-64, for example, both men and women in Canada are somewhat more protected from suicide by marriage than are their counterparts in the United States. Such differences as there are may possibly be related to the greater proportion of Americans who have been married more than once and who have carried forward the negative effect of a divorce into a new marriage.

PARTIAL COPYRIGHT LICENSE

I hereby grant the right to lend my thesis or dissertation (the title of which is shown below) to users of the University of Victoria Library, and to make *single copies only* for such users or in response to a request from the library of any other university, or similar institution, on its behalf or for one of its users. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by me or a member of the University designated by me. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Title of Thesis/Dissertation

SEX, MARITAL STATUS AND SUICIDE: A REPLICATION AND

REFINEMENT OF THE WORK OF W. R. GOVE

Author



Lynne Alison Chisholm

Name

30th October 1974

Date