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AN INVESTIGATION INTO THE  
FRIENDSHIP BEHAVIOUR OF MAORI AND PAKEHA  
CHILDREN

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## ABSTRACT OF THESIS

In this thesis, two aspects of the friendship behaviour of a group of children are investigated to see whether an apparent difference in patterns of behaviour between Maori and Pakeha children is supported.

Two questionnaires requiring written answers are prepared and presented to all the pupils (938 in all) in the Form One intake of all five schools in a North Island town, on two occasions six months apart. These surveys provide the data on which the analysis is carried out.

The relevant literature is searched for possible 'causes' of the presumed difference in behaviour. A hypothetical explanation is proposed derived from the literature which places emphasis on the effect of different patterns of child socialization, believed to be culturally based. In particular, it is suggested that Maori families might still be influenced by traditional childrearing patterns which exert some influence towards friendship networks which are larger and more fluid than those of Pakeha children. This is the question being investigated.

Besides the variable Ethnicity, the effects of four other variables, considered to be plausible alternatives, are included in the investigation. All five variables are believed to have significant influence within the family life experiences of children. The effects of these variables on the criterion variables, the Size and Persistence of the children's friendship groups, are measured and compared.

The first stage of the analysis indicates that among the children surveyed, the Maori children tend to prefer friendship groups that are larger but more

changeable than those of Pakeha children. However, the result of the second stage analysis, using multiple regression analysis, indicates that when the effects of the other variables are controlled for, the influence of ethnicity is in fact negligible. Of far more significance are the effects of family size and the presence of similar age relatives, variables which are closely correlated with ethnicity. A contributory factor to the original impression would be the high 'visibility' of the Maori children.

The results of the investigation do not lend any support to the explanation proposed, viz. that the friendship behaviour of Maori children is still showing the influence of traditional child-rearing practices. The evidence suggests that larger and more changeable friendship groups tend to be favoured by those children, Maori or Pakeha, who grow up in association with a large group of similar age siblings and cousins.



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INTRODUCTION

In this thesis, an aspect of the friendship behaviour of a group of children is investigated to see whether Maori children behave differently from Pakeha children in this respect. In conjunction with the empirical investigation of the children's friendship behaviour, a possible cause for the suspected difference is sought as a means of providing theoretical guidelines to the investigation. A case is proposed in favour of the influence of different methods of childrearing.

The question being investigated arose from the impression formed over a period of years while observing children playing, to the effect that there seemed to be fundamental difference between the ways Maori and Pakeha children characteristically associated with other children. These observations took place in and around one North Island town where most schools have between 30% and 50% of Maori children. Whereas most Pakeha children seemed to prefer playing together in smaller and more stable groups, it seemed that the Maori children tended to prefer to associate in larger and more fluid groups. It is not suggested that any form of conscious segregation was at work, neither set of children seemed to behave in an exclusive sort of way. There would usually be some Pakeha children participating in the large fluid style of grouping, and some Maori children in small groups with or without Pakeha companions. But overall, there developed a general impression that two quite different styles of association were functioning side by side; the 'Pakeha' one, the groups smaller and seemingly more persistent; and the 'Maori' one, the groups larger and more diffused, more fluid, and also more transitory perhaps.

Was this difference a real one? Was it really an ethnic difference? Was it of any wider significance? Perhaps the impression was misleading because of the high 'visibility' of the Maori children? Could the impression be measured more accurately? If it should be found that the notion had some support, it might be possible to identify one or more contributory influences.

The intention here is to find a way of comparing the friendship behaviour of Maori children with that of non-Maori New Zealand children to see whether the Maori children behave differently in at least this one respect. Maori children in this case are considered to be those whose parents are both Maori.

While children of mixed Maori-Pakeha parentage may or may not be influenced by Maori cultural values, precepts and practices, children, both of whose parents are Maori are more likely to display behaviours that are noticeably different from Pakeha children. It is not being suggested that the behavioural difference has a genetic base, but that vestiges of traditional practices may still survive, simply by being passed on unconsciously from one generation to the next.

Whether traditional practices or values may still be contributing, slightly or significantly, to present-day behaviour patterns of Maori children has been the subject of some debate. It has been suggested (eg. Adams, 1973) that such questions are no longer relevant, and that any differences in behaviour displayed by Maori children today are better explained by variables such as SES. or family size and so on. On the other hand, Walker (1973) holds that there is cultural continuity within Maori society even over the transition from rural to urban living. Hence, the possibility that something from a cultural past may still exist, in this case an apparently distinctive preference for larger friendship groupings, should be investigated,

even if the result is only to establish more definitely that the suspected influence no longer exists. However, if a broad and possibly significant pattern of different behaviour should be found, then whatever its source might be, the difference itself should be recognised, especially by those involved in education.

In this study, the search for a behavioural difference is restricted to an examination of one aspect of behaviour only, viz. children's preferences relating to:

1. the size of friendship groups, and
2. the stability of friendship groups.

These are abbreviated in the text to 'Size' and 'Persistence' of friendship groups for convenience.

Although Maori and Pakeha children have been spoken of in a general sense to this point, the references are in fact limited to the situation in one North Island town where there happens to be a sizeable minority of Maori people. For several reasons it would not be valid to generalise more widely in the absence of further research. The first reason relates to ethnicity. It is possible that whatever constitutes 'Maoriness' today may vary to some extent in different tribal areas. Secondly, the effects of other environmental variables such as local history, the numerical ratio between the two ethnic groups, between 'local' and 'immigrant' Maoris, between rural and urban populations, introduce too many 'unknowns' to permit confident predictions over a wider area. The findings of this study should be considered applicable only to friendship behaviour in a particular geographical area.

As a basis for a research project the idea outlined above seemed to have some interest and also some methodological advantages which might be exploited. To mention some of the apparent advantages first, this idea seemed to 'get around' some of the objectivity problems commonly found in social science research.

If children were asked to write down lists containing the names of their friends, on say two occasions six months apart, these would form some sort of quantified expression of an attitude about one aspect of friendship at least. Something about the children's attitudes would be revealed in some degree, unselfconsciously and without having recourse to introspection. The delicate topic of ethnic differences could be explored unobtrusively. A nebulous impression could be confirmed or refuted in a quantifiable way, perhaps, (without revealing the underlying interest in ethnicity) by asking the children to write lists of their friends' names, thus not tapping whatever value judgements they might have in that area. These expressions of attitude should not raise the doubts often felt by researchers about introspection, 'socially desirable' answers, and whether the reasons given are the 'real' reasons.

These expressions of attitude would provide the Dependent or Criterion Variable of the investigations.

Also, if some 'background' information could be obtained about each child, eg. parents' ethnic origins and occupations, the size of the family, whether there are relatives living in the district and so on, then it should be possible (technically) to partial out the effects of some at least, of the environmental variables that might appear to co-vary with ethnicity, using the multiple regression procedure.

These environmental differences among the children would form the Independent Variables.

Problems likely to arise seemed to centre around such questions as: How many Maori-looking children were partly Pakeha? What actually would such lists indicate about attitudes to friendship? If a difference in behaviour between Maori and Pakeha children were revealed, what would it mean? How or where should causes or contributory influences be sought?

Assuming that some plausible-sounding 'explanation' should be found, could the connection between cause and effect be proved? If a behavioural difference were not uncovered, what would this say about the present day occurrence of Maori cultural influences?

More detailed enquiries seemed to be worthwhile. The research problem would need to be defined more specifically. This first chapter describes the preliminary steps in setting up the project, the considerations involved in planning the type of investigation, including a brief discussion of some general issues related to the topic.

#### A MAORI - PAHEKA DISTINCTION

It seems desirable to begin by making some reference to Maori-Pakeha differences in general terms. The impression originally formed referred to Maori and Pakeha children. Such an impression was obviously based on the appearance of the children, and just as obviously, a more accurate differentiation will be required for this study. The question arises, what sort of meaning is conveyed today by the terms Maori and Pakeha? All too often, it seems, when Maori-Pakeha differences are being discussed, misunderstandings persist unperceived because variations in the connotations of these terms pass unnoticed. Generalisations are frequently made using these words which are vague and have different meanings for different people. The problems associated with this ambiguity can be illustrated as follows:

To refer to Maori children (or to Pakeha children) is to categorise according (approximately only) to ethnic origin. But, by common usage, 'Maori' often refers to many people descended from Pakeha as well as Maori ancestors.

In these cases, the first criterion is usually supplemented by a second, 'Maori appearance'. Other people, similarly descended but Pakeha in appearance, are not usually categorised as Maori unless they proclaim themselves to be so, a third criterion. However, in some of these cases at least, this last criterion is not seriously accepted by others unless the subject overtly and deliberately adopts what he or she considers to be a Maori set of behaviours, a fourth criterion. As if the scope for confusion were not enough so far, the variety which is contained implicitly in the last criterion will be indicated briefly.

The experiences involved in being a Maori are likely to vary considerably according to many factors: sex, age, the part of the country lived in, tribal affiliations, lineage in Maori terms (whakapapa), occupational status in Pakeha terms, whether Maori is spoken, extent of knowledge of traditional matters, rural or urban residence, type and degree of association with other Maoris, and with Pakehas. (Garrett, 1973)

For the purposes of this investigation it is necessary to restrict the meanings of these two principal terms. As things stand, to define a person as a Maori is not to allocate him to a category within which every case is identical, it is to apply a vague social label with few fixed connotations.

The children observed appeared to be Maori, but were they? What should be the basis for deciding ethnicity? No doubt whatever method is used will have some weaknesses (see above). Self-identification seems preferable to identification by teachers, but sometimes children call themselves Maori simply because they find it is easier than explaining the details. If the children were asked to describe the ethnic status of each parent, the result might be more accurate. Even though the statements might not be strictly correct biologically, they might make it possible to eliminate some doubtful cases.



On this basis children could be allotted with greater accuracy to categories such as 1. Maori, 2. Pakeha, 3. Maori/Pakeha, and 4. Others (to include mainly those not born in New Zealand). The primary comparison would be between the first two categories (so defined) while the third could be used to supply further data. This matter of being able to allocate children to ethnic categories with some accuracy is of importance in this study because, in effect, this thesis is asking whether, and if so, to what extent, children born of Maori parents will behave differently from children born of Pakeha (ie. non-Maori New Zealand) parents of European descent.

The question of disentangling genetic from cultural influences lies outside the scope of this thesis, however, the debate in the Harvard Educational Review during 1969-70, following an article by A.R. Jensen (1969), illustrates the complexity of the evidence and the arguments surrounding racial (ethnic) difference. The emphasis in this thesis falls on a search for a cultural component, and to see whether it still plays a significant part in the lives of those Maori children being surveyed, in comparison with some other kinds of influence presumed to affect all the children being surveyed, Maori and Pakeha. Careful categorisation of the children is essential because systematic and substantial differences in family socialisation methods, everyday experiences of children in the home, neighbourhood or school, are not readily apparent across any of the social categories usually applied in New Zealand, eg. social class, rural-urban, Maori-Pakeha, large or small families. In particular, it cannot be said that Maori families experience a way of life which is totally different from that of Pakeha families. It is for this reason that confusion arises because certain behaviours may appear to be characteristically (if not exclusively) Maori, mainly because of the

high 'visibility' of Maori children, when they are possibly due to interaction effects with some other influence or range of influences whose existence is less obvious such as family size, rural-urban residence or S.E.S.

It has been suggested above that there is great variety in the experience of being a Maori. It is very likely that this range overlaps considerably the range of experience of most Pakehas and yet it may be the case that despite all the experiences that Maori children share, or appear to share, with Pakeha children in their early formative years, it is possible that there could still be some sort of influence which exerts itself systematically in those early (and perhaps also later) years so that some Maoris at least still display behaviour that has some distinctive features. A possible source of such an influence will be outlined in Chapter Two.

#### A MATTER OF BIAS

In an investigation of this kind, the possibility of bias affecting the results must be acknowledged and suitable controls be provided. Firstly, the aspect of child behaviour to be assessed should be of such a nature that the public enquiry phase, ie. the collection of the data from a group of children, should not reveal to those participating that the study is primarily concerned with their ethnic origins and the possible consequences thereof. This is to preclude the possibility of subjects displaying some form of ethnic bias, either by giving what they think might be the socially approved answers, or by giving facetious, irresponsible or simply ill-considered answers. The study's true purpose needs to be disguised in some way too, not only for the above reasons, but also because for some people (teachers as well as parents) ethnicity is a delicate subject best swept under the carpet and left there.

Secondly, and related to the first requirement, 'opinion sampling' should not form part of the method. From children especially, the proffering of possibly second-hand and uncritically accepted opinions would be unlikely to provide useful information. A more important defect of opinion sampling is that introspection (upon which it is based) is a method of psychological enquiry which has been severely criticised, (eg. Hebb 1972, Morgan and King 1971). Therefore, no useful purpose would be served by giving child subjects in particular the opportunity to provide reasons or explanations for their behaviour.

Thirdly, the possibility of bias on the part of the researcher must be recognised. This can enter at many points and controls must be consciously and conscientiously instituted, as for instance in the measure of the children's behaviour. Obviously, the more direct the connection between the children's responses and the social situation to which they refer, not only is it more likely that the relationship can be demonstrated, but it is also less likely that the researcher will be able to manipulate the evidence. Interpretation of the meaning of the relationship might be arguable but the actual numerical differences constitute facts verifiable by other workers. The integrity of the researcher is also vital at the point of contact with the children to avoid giving 'clues' as to the answers expected. Generally, his aim should be to prevent the conditions being varied, particularly in ways which might work unfairly in favour of the hypotheses being tested. (Kerlinger 1964).

#### THE NATURE OF THE DEPENDENT VARIABLE

It should be apparent that the observations being made about the children's behaviour do not attempt to analyse individual behaviour at all. The reasons for each child's behaviour are not sought, nor its effect on any other

individual. Interest centres only on two readily observable and rather simple features which say very little about each individual and ignore many other aspects of his behaviour or personality. Also, it has to be admitted, these two features do not say much about either the nature of friendship or about friendship behaviour. What they do provide is an indication of each child's preferences as to the size and changeability of his friendship network. The usefulness of such information is therefore probably limited to large-scale exploratory studies where the aim is not the 'in-depth' analysis of an individual's behaviour, but the search for widespread patterns of similar behaviour observable in many individuals. In such cases, the more complex the 'bit' of behaviour to be studied, the more difficult it is to observe it accurately and also the less frequent will be its occurrence. Restricting the 'bits' of behaviour to two simple aspects of 'friendliness' or 'approaching-others' behaviour as in this study requires justification perhaps, as it may seem too elementary to use as a criterion on which to base a statement about ethnic differences. Such a procedure seems justifiable for several reasons.

Firstly, the measuring instruments contemplated (lists of friends' names) do seem to provide a reasonably valid measure of a child's feeling about the preferred size and persistency of his friendship groupings, which was, after all, the original impression formed. The underlying assumption is of course, that how a child feels about friendships is influenced by ingrained cultural pressures (as well as by personal idiosyncracies). If this particular cultural influence exists, its behavioural manifestation might be measurable as a significant trend across a large number of cases.

Secondly, it must be remembered that the aim is to seek broad patterns, not to analyse deeply the nature of the individual child's friendships.

Thirdly, as suggested earlier, the basis of the ethnic categorization is tentative. Apart from its two surface manifestations, as it were, the social label and the distinctive physical appearance; the behavioural basis for ethnic differentiation might be more apparent than real, particularly as far as young children are concerned. It might be better to take a small step that can possibly be substantiated rather than a more ambitious one with a much lower chance of success.

Fourthly, and arising from the previous point, because it is anticipated that the level of uniformity of behaviour within either ethnic group might not be very high, the basis of comparison should be limited in this exploratory study. If further examination of the question seems warranted the complexity of the variables could be extended.

Fifthly, the final consideration is that the dependent variables should be directly quantifiable, which, of course, the lists of friends are.

Having made decisions about the independent and dependent variables, the overall requirements of the test are falling into place. The next question to be considered is the interpretation of the test results. If behavioural differences are found which appear to co-vary with any of the categories in the independent variables, how and where might the causes or relationship be sought? To avoid the unproductive, ad hoc approach, the search for some appropriate or plausible mechanism which could be shown to be related perhaps to the differences in behaviour will involve recourse to the literature on child socialization practices in New Zealand. This process has the added advantage of supplementing the initial 'Hunches' as a source of hypotheses to be investigated in this project.

### INTERPRETATION OF THE TEST

Simply to confine an enquiry to this empirical level would provide only a simple statement of fact: Maori children, ie. those who identify as Maori do (or do not) have different patterns of friendship behaviour from Pakeha children. In order to move beyond the empirical statement of fact some attempt at 'explaining' the fact seems called for. Either hypothetical 'causes' for the observed phenomenon might be proposed, or else predictions might be made citing some later behaviour as 'effects'. This latter step would be moving closer to the form of the naturalistic field experiment (Kerlinger, 1964. 382-6) but would be beyond the resources presently available. In the circumstances, it seems preferable to seek the most likely (in the researcher's opinion), 'causes' or 'contributory factors' or antecedent events, and then endeavour to show a plausible chain of inferences leading from those antecedent events or conditions to the phenomenon being measured.

What these antecedent conditions might be is the next concern. It has been suggested that a major source of the presumed difference in friendship behaviour might be found in the child's early experiences. The child socialization methods; child-rearing practices, type of parent-child interaction, style and extent of interaction with other relatives and parents' values about the child's present or future roles, might all differ as between Maori and Pakeha families, perhaps markedly or perhaps in small, subtle, scarcely noticeable ways.

The problem here is to find out just what sort of experiences the children might have had when they were younger. It might be suggested that descriptions based on self-report might fill the gap, but there are several weaknesses inherent in this method.



Firstly, for the children currently being surveyed, self-report, either by children or parents, would involve reliance on their memories back over many years. Secondly, the sorts of behaviour being described are complex in their interaction and it would probably be beyond the ability, level of insight and expression of unsophisticated people to describe them at all accurately. Thirdly, there is the possibility of respondents trying to guess at the 'socially-acceptable' answers, ie. to give the interviewer those answers they suspect he might like. Taking these points into account, reliance on any use of self-report in this connection could not be considered.

Direct reference to the earlier years of the children seems out of the question. Another alternative would be to recast the whole enquiry, to make it a longitudinal-type study over a period of many years, following the experiences of two groups of children, ('representative Maori' and 'representative Pakeha' presumably) and observe their friendship behaviour in later years. Even if this were not out of the question for practical reasons, it should still be preceded by an exploratory survey seeking to establish in general terms whether the expected answer is even a possibility.

The final aspect of the test to be considered at this stage is its scope. To what sized group of children should it be administered? What age or ages should they be?

#### THE SCOPE OF THE SURVEY

There are a variety of factors to be considered here. In the first place, the aim is exploratory rather than definitive or narrowly analytical. It is expected that behavioural differences between any of the categories contained in the independent variables will not be large, mainly because of the lack of marked differentiation

in behaviour patterns in New Zealand society as a whole, (The vaunted egalitarian ethos). Harker (1976) refers to New Zealand's 'flatter social landscape'. It is also expected that variations within categories could be of approximately the same order of size as the between-group differences, due to the minimal effectiveness of societally imposed constraints affecting any of the categories. In brief, it is expected that it will be difficult to distinguish between the 'within-group' and the 'between-group' differences. For this reason the size of the sample should be as large as possible.

Turning to the question of age, it would seem that one source of variance which could legitimately be avoided is that due to differences in age, hence it is desirable that all the children be of approximately the same age. As to the most suitable age, two major interlocking problems become apparent. As a first working assumption, it had seemed that the most likely source of difference between Maori and Pakeha children would be experiences within the family. Prior to starting school at five years, children would be much less affected by experiences outside the family than they would be a few years later. But, because a large scale survey seems essential (to minimize the effects of random variation and for other reasons), such a survey would require written answers for practical convenience. Children of five years could not be expected to write the sort of answers required, nor even could children a few years older. To test this point, a small scale pilot test was given to a group of Standard Three and Four children. It quickly became obvious that even at that level, children had problems. Some could not spell well enough for their friends' names (or their parents' occupations) to be recognized. Some did not know (or appeared not to) what sort of work their parents did. It was felt that the minimum age group which could be used would be Form One children.



The interlocking problems were of the 'Catch-22' variety, because to observe the children in the only manner believed practicable, at the time when the suspected source of influence would be most potent was impossible because the children could not write, while to observe their behaviour at an age when they could write, seemed unsatisfactory because of the long time span during which many other extraneous and/or systematic influences could be expected to be at work. Upon reflection, it was felt that a survey carried out on children aged 11-12 years might still provide an adequate test of the supposed ethnic difference, for the following reasons.

If Maori children do in fact behave differently from Pakeha children (and the statistical test proposed should provide some indication on this point) then the most likely, but not necessarily the only possible, source of this different behaviour would seem to be the Maori cultural characteristics of their families. Apart from this influence, children of both ethnic groups (certainly all those living in urban areas) seem to be exposed to virtually the same experiences. They go to the same schools, play the same games together, watch television, listen to radio, visit the same cinemas. At school, Maori children are under a variety of pressures to conform to Pakeha social standards (Walker 1973). To summarize all these influences, it might be said that their total effect seems potentially so strong that it would be surprising if the Maori children displayed any differences at all. The nett effect of delaying this test of children's friendship behaviour till the age of 11-12 years would seem to be to strengthen the similarities between Maori and Pakeha at the expense of the particular difference being investigated. Therefore, it was concluded that the use of Form one children would provide a rigorous test of the hypotheses.

Another advantage of surveying children early in their Form One year is that all of them, including those attending the two Catholic schools in the area, would have just entered a new school. This refers to the change from primary school or convent and means that all the children would be facing the similar experience of having to adjust to a new environment, and to develop new friendships.

The most appropriate decision here, regarding age, seemed to be that the entire Form One age cohort of the town in which the observations have taken place, should complete the questionnaire being planned. (See Appendix One for a copy of the questionnaire)

#### CHARACTERISTICS OF THE SURVEY QUESTIONNAIRE

Summarizing all the features outlined above it would seem that a workable basis for an empirical test would be to ask a large group of Maori and Pakaha children to write down a list of their friends' names and then, after an interval of say six months, repeat the process. This would indicate both the preferred size of each child's friendship groupings and the extent to which changes in membership are made over a period of time. The children could be asked for details of their family composition at the same time, and, buried among the other questions would be some about the parents' ethnic identities. Careful wording of the instructions might reduce if not eliminate the possibility of the children perceiving these questions as indicating an interest in a Maori-Pakeha comparison. Further descriptions, including the operational definitions, of the independent variables are given in Chapter Three, as part of the development of the hypotheses.

A questionnaire with this format would provide: Firstly, various 'social facts' about each child, viz, parents' occupations and ethnicity, family size, child's birth order, family address and the proximity of relatives, ie. the data needed for the independent variables.

Secondly, three numbers or 'scores'.

1. The number of friends that the child records.
2. The number of friends six months later.
3. The number of names occurring on both lists.

A ratio 'score' formed by stating the number of names repeated as a proportion of the number of names in the first list would constitute a way of indicating the child's preference regarding persistence of friendships. A low score on this list would indicate a rapid turnover of friends, suggesting a very fluid situation, a casual attitude about keeping friends perhaps, but certainly revealing a very different situation to the one where the turnover of friends is very low.

The number of names on the first list can be used to indicate the preferred size of the friendship group, while the number of names occurring on both lists provides some indication of the preferred level of persistency displayed in retaining friendships.

These two scores for each child form an empirical basis upon which a useful statistical analysis is possible. While it would be unrealistic to expect that individual children's scores would be exactly the same if the research were repeated a year later, it does seem reasonable that groups of children possessing some similar characteristics might, at a later retest, produce group scores that were similar. Based on the expectation that such uniformities are likely, then, if the test is tapping a significant aspect of behaviour, the group means obtained by a single research project might have some significance. However, a replication of the project would be required to confirm this.

More particularly, any differences between the means of each ethnic group would be most useful in indicating whether those children who identify themselves as Maori respond differently (as a group) to those who identify as Pakeha (as a group). But in this connection it is necessary to keep in mind two points: firstly, the size of each group is important in assessing whether a mean difference of a given size is large enough to be statistically significant, the larger the groups the smaller the mean difference needs to be; secondly, when a hypothesis is being developed for testing, the researcher must exercise caution in interpreting levels of significance. A tendency may be apparent just below a given 'p' level, it may be theoretically significant, but further research should be carried out before any change in the status quo can be accepted. (Glass and Stanley, 1970. 282. Ari, Jacobs and Razavich, 1972. 131.)

Because of the difficulties foreseen in obtaining accurate data for each child surveyed, the only practical alternative seems to be to look for evidence in the literature about the existence of any generalized patterns of family socialization in New Zealand which might seem to be relevant to the question of Maori-Pakeha differences in the particular district chosen. The actual relevance of this material to this group of children is unknown of course and requires the assumption that the Maori and Pakeha families in the district conform substantially to whatever general patterns are found to exist.

More importantly however, from the literature must be sought appropriate foundations from which to derive the theoretical framework, into which the investigation phase of this thesis must be fitted. Two functions are served by this, firstly, the literature relates the project to other research and to other appropriate theory, and secondly, ideas are generated which may guide the development of the most suitable research design, both of which help to avoid an 'ad hoc' approach.

The search for an appropriate mechanism through which the assumed ethnically-based influence might be transmitted to children and an extended exposition of that mechanism as an element in the child-socialization processes form the contents of Chapter Two. In Chapter Three some of the assumed effects of this and other variables on the later friendship behaviour of the children are developed into formal hypotheses. The method of putting these hypotheses to the test is discussed in Chapter Four, while Chapter Five contains the results of the tests. In Chapter Six an interpretation of the results is offered, together with a discussion of some of the implications which seem to arise.

## CHAPTER TWO

### A THEORETICAL MODEL

In the search for factors which might contribute towards an explanation of the presumed difference between Maori and Pakeha children, the literature on child-rearing and family socialization practices in New Zealand has been examined, only to find that sources of real information on these matters are extremely few in number. In fact, the only substantial research study published to date is that of Ritchie and Ritchie, 1970. This is, they explain, a partial replication of the Sears, Maccoby and Levin (1957) study of 370 Boston families. But whereas Sears, et al, did not claim representativeness beyond a Boston middle class group, Ritchie and Ritchie, on the basis of 151 families, offer their generalizations as representing New Zealand-wide patterns '---at least until other and better research can be undertaken.' (Ritchie and Ritchie 1970). Ritchie's 151 families are divided into six groups - three Maori and three Pakeha - thus making each group rather small for such far-reaching generalizations. As far as the comparisons between Maori and Pakeha are concerned, however, the evidence of Maori family practices is supplemented by the research carried out previously by Ritchie at 'Rakau' (1956, 1963) and by the Beagleholes' (1946) study of 'Kowhai'.

Writing in the same year, Houston (1970) notes the paucity of studies directed at the Pakeha family, but his comment on the "ready fund of evidence on the development and the childrearing practices of the Maori" (p.26) does not really bear examination. Of the three authors he cites, Ausubel (1961) and Schwimmer (1964) both acknowledge their debt to the third author, Ritchie (1956, and 1963).



Any attempt to analyse differences between Maori and Pakeha in child rearing methods which possibly contribute to behavioural differences in later childhood must rely heavily on Ritchie's observations and conclusions, mainly because there is no other research of a comparable magnitude, but conversely, until there is other research which supports those conclusions, inferences based on Ritchie's material must be treated cautiously.

In this thesis, the distinction between Maori and Pakeha child rearing methods which Ritchie regards as a fundamental one is noted and some of the implications which seem to follow from the differences in those methods are developed and extend into the later years of childhood. Means of testing some hypotheses derived from the implications are proposed.

#### COMPARISON OF MAORI AND PAKEHA CHILD REARING METHODS.

Ritchie's description of the Pakeha family emphasizes the effects of its nuclearity, particularly those effects that isolate and insulate it. (See Houston 1970, 21-35. Ritchie and Ritchie (1970) and Chapter 10 by J. Ritchie in Webb and Collette, eds. 1973).

By comparison, the Maori family contains features which appear to indicate the survival of elements believed to have derived from the extended family system considered typical of Polynesia, (Ritchie and Ritchie, 1970, 129-138). The emphasis is on the lack of emotional exclusiveness, together with a broad sharing principle and a diffuse boundary between the nuclear family and the extended family group.

What this difference between the two sorts of family actually means in terms of every day experience can be obtained from the descriptions by Houston (1970) and Ritchie and Ritchie (1970).

### THE PAKEHA FAMILY

Houston (1970) discusses the question of which characteristics could be considered typical of the nuclear family and draws attention to the essential criteria of nuclearity. First, there must be a solidary mother-child relationship ie. one characterized by a mutual dependence transcending physical care, which must exist over a period of years, and secondly, there must be a special relationship between the child's parents; special in the sense that it is mutually possessive and from which all others (including close relatives) are strongly excluded. Houston attributes this to conditions peculiar to New Zealand, such as the isolation of pioneering days, followed by the sort of isolation quite common today which is produced in part by geographic, occupational and social mobility. He suggests that these influences, combined with some lesser features, tend to accentuate the intensity and exclusiveness of the emotional relationships within Pakeha families.

Ritchie (1973) refers to the lonely position of Pakeha mothers, a loneliness which serves to intensify the mothers' relationships with their children still further. The corollary is of course that the children brought up in such an environment become conditioned to behaving in similar ways (lack of other models) in their associations with other people, where-ever possible. For the purposes of this study, the main point is that in the Pakeha family the mother (as the chief socializing agent) has virtually undisputed control over the child for the first five years at least and then usually for a few more years but at a reduced level. During this period a complex, intense and exclusive emotional relationship usually develops between mother and child, and, to a lesser extent, between father and child. The mother becomes the child's primary identification figure and reference person.\*

See note at foot of next page.



She mediates most of his experiences so that he becomes accustomed to hearing an adult point of view expressed even if he does not mould his own perception appreciably to that viewpoint. As far as his relationships with siblings and peers are concerned, these are largely controlled by adults, usually his own mother but occasionally by others such as friends' mothers or kindergarten teachers.

### THE MAORI FAMILY

Contrasting with the small, tightly-knit, rather isolated Pakeha family unit is Ritchie and Ritchie's (1970) characterization of the Maori family. Chapter 19, in particular, presents a composite picture of Maori child rearing practices, bringing together the results of the Beagleholes' (1946) Kowhai study, Ritchie's (1963) Rakau studies as well as their most recent research. This section discusses in some detail those aspects of Maori and Pakeha child-rearing as described by Ritchie, which are considered most likely to contribute in some way to producing different patterns of friendship behaviour in later childhood. However, this discussion will deal more fully with the process affecting Maori children mainly because it is much less visible, being largely submerged by the dominant Pakeha pattern. Another reason for the emphasis on the Maori process is its potential significance if this interpretation can be shown to be still a vital element in the socialization of Maori children today.

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\* For the purpose of making general statements about 'the child' in this thesis, but especially in this Chapter, the sex of the child is stated as male, but both boys and girls are being referred to unless otherwise indicated. Obviously, childhood experiences will vary in

many respects for boys and girls. Both Maori and Pakeha parents (for different reasons, partly) distinguish between the sexes in their socialization practices (Ritchie and Ritchie 1970). At appropriate places, reference is made to the different treatment or behaviour of boys and girls.

There seem to be two main features of Maori child rearing which distinguish it most clearly from Pakeha practices. The first of these is what Ritchie describes as a '.....lack of exclusiveness between Maori parents and children.....' (p. 132).<sup>\*</sup> There is not the same sharp boundary as there is surrounding the Pakeha nuclear family. Ritchie suggests that this more diffused level of emotion denotes and is part of the still partially-functioning extended family structure in which adult members may continue to expect to share close emotional ties with each other's children. Also, this general sharing in the warmth of the extended family is part of a broader principle of sharing both material and emotional benefits. The Ritchies consider that this principle has derived from the traditional Maori life style and also that it has parallels in other Polynesian cultures (p. 138).

Another aspect of difference is that Maori socialization encourages more demonstrative displays of emotion than the Pakeha norms. Given this style of emotionality permeating the family relationships then it will seem quite natural that there should not be the sort of bond which is characterized by an exclusive intensity. With regard to the adoption out of a child, for example, the mother will not feel bereft or threatened by the loss of the child because in fact there is not really a loss. She knows that the child will remain part of the larger family circle, still accessible to the mother and retained within the diffused but nonetheless secure emotional ties of the extended family. All parties are aware of who the child's real parents are.

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<sup>\*</sup> Page references in this chapter are to 'Ritchie and Ritchie' (1970)

In general, the children of the extended family, cousins all, are likely to experience close and demonstrative, but not intense, ties with each other and with the adults in the group.

It is within this context that the other distinctive feature of Maori child-rearing must be understood. It has been mentioned earlier that the Pakeha mother tends to retain a close physical control over her child or children. (The Ritchies refer to 'radar check', 'monitoring,' and 'unremitting contact') as well as a tight emotional bond. The Maori practice, on the other hand, they argue, involves an active transfer from the mother to the older siblings, or sibling substitutes, of the responsibility for the physical caring for the younger child. Traditionally, this happened soon after the birth of the next child and, according to Ritchie, is still a common occurrence in Maori families. Associated with this process and a psychologically essential part of it was the weaning of the child from emotional dependence on the mother. 'Their concern for any earlier child must therefore be reduced once another is on the way.' (p. 131) It could be argued that this must be a natural part of child-rearing in any large family, but this process is supposed to take place regardless of the size of the family. In any case, Ritchie claims that this is not the whole explanation, there is a deep-seated cultural pattern taking effect, a pattern moreover which fits in with the extended family system, (the 'co-relative family'! see Vaughan 1972) which includes the whole family group living in close proximity, the elders caring for the young children, with all able-bodied adults engaged in communal tasks.

The consequences for the older baby as the mother transfers her attention to the new one are described by Ritchie:

"The glowing world of early childhood comes to a close quite sharply as the child graduates from 'lap' baby to 'floor' baby. Thereafter, older children assume greater care for younger children and the two-year old must find his peace with them". (p. 133) The mother is still there but is more in the background; she delegates a large part of the daily tasks of the household to the older children, including the care of the toddlers. Her time is divided between the new baby and other adults.

Ritchie mentions the cultural values he discerned as being associated with the mother's behaviour and which presumably could contribute to the persistence of the pattern:

"They (the mothers) do not seek to make the immature companionable but accept their immaturity. They do not withhold love or privileges from their children nor seek to shape their conduct towards explicit ideals. There is a simple trust in the goodness of childhood..."

Children "...are not excluded (from adult affairs) but neither are they included nor allowed to interfere. They are just there".  
(p. 131)

There is the expectation that young children will quickly learn to be independent of adult supervision; that older children will assume responsibility for younger children and for many family tasks, and that the socialization of younger children can safely be left to the older children with a minimum of adult interference. There is considerable expectation of help from kinsmen and of giving help to other kin as well. The Ritchies note ... "the readiness and willingness of adolescents to step in as parents..." (p. 132) ie. as parent substitutes; a readiness derived, it may be assumed, from strong cultural conditioning.

Through all of this, it is possible to perceive a cultural 'programming' of the parents towards relinquishing emotional as well as physical control over their children at an early age. An unintended consequence of this loss of control, or, in a diluted form, this diminution of influence over the children, would be the impossibility of exercising the sort of emotional blackmail as "Mummy won't love you if you do that". The feeling for the children may be and no doubt is, no less affectionate, but the bond between mother and child is neither intense nor exclusive, neither possessive nor demanding. Nor is there any suggestion of 'guilt' feelings at abandoning a heavy responsibility as might be the case with a Pakeha mother. The whole situation is quite different as the following sentence regarding the Pakeha family suggests:

"... the progressive slow independence training which characterizes the Pakeha family has not progressed far by the time the child is four and the parental expectations are lower for this kind of behaviour (ie. independent behaviour) than in the Maori family. The Pakeha mothers report more conscious development. They expect less independence than do the Maori mothers so the modelling process is longer, more controlled and more differentiated." (p. 141)

Setting this excerpt alongside the previous comments points up the extent of the differences between the two styles of child-rearing. This long period of control and training by the Pakeha parents intensifies and makes more complex (due to elements of ambivalence) the emotional bond between parents and child which develops in the pre-school period without much opposition from external, potentially rival groups.

This bond enables the Pakeha parents to retain their place as the child's primary reference group for a few more years until the challenges from the child's peer group become much more formidable in adolescence.

With Maori parents, (according to the Ritchies) control over each child is relinquished earlier, or (to describe the situation more cautiously) is shared with the child's older siblings and peers. The effects of this transfer of power on the socialization of the Maori child have been described by the Ritchies as they occur in several settings and the similarities are apparent in Ritchie's earlier data (1963) from Rakau, rural pa, small town and city groups, albeit in progressively weakening form. "...for the Maori child there is always someone to turn to. He is rarely alone, and other children become an extension of the family." (p. 130) BUT, his mother no longer acts as mediator on his behalf, and he must "make his peace" with his older guardians. Any tendency to remain dependent on his mother is rebuffed, as she may "...inhibit it by sharp punishment; children of two have learned that life with older children, on the whole, provides more satisfactions and fewer "growlings" and "smackings" or other negative experiences than does life with parents. It is also simpler and more easily controlled." (p. 134)

The Maori mother in the pa group, "...has handed control over to the peer group, the play group, the older siblings and, secure in the world of meaningful adult concerns (and babies) she sees no reason to keep a radar check on the child or moralize or shape what he or she



does." (p. 142) In the small town and in the city too, there is still the tendency apparently, for the mother to "... punish for dependence, still require the older children's help with the younger, still use rewards rather than praise." (p. 144) This is an attenuated form of the pa version of the traditional style, but the cultural values are presumably still present even if only in an implicit fashion, as in the younger mother's unconscious imitation of her mother's child-rearing methods and also perhaps, for want of a different model.

Nevertheless, for the child the result is more or less the same. As a toddler he learns to transfer his dependence from his mother to his older siblings and to defer to his peers to the extent that they are enabled to exercise control over him. He does not experience that continuing close, intense, exclusive relationship with his mother (and, to a lesser degree, with his father) that Pakeha children usually have. Because the child is not in constant social (including verbal, of course) interaction with his mother, his opportunities for modelling himself on her are limited. She in turn, is not constantly available to mediate all his new experiences, interpreting, explaining, building his vocabulary and developing his concepts, attitudes and values.

"We placed great emphasis on this socialization by other children and saw it as providing a source of confidence and security in action when in or with a group but leaving the individual child 'whakama' when unsupported by others. This term means shy, distressed, embarrassed, ashamed and it is a feeling made more likely by the expectation of prejudiced judgement by Pakehas." (P. 134)

These comments by the Ritchies bring out clearly the ways in which the Maori child is likely to feel dependent on the group and therefore why he will feel obliged to conform to their demands or at least why he will be anxious

to secure their approval.

This concludes the account of those features of the Maori child's socialization as interpreted by Ritchie and Ritchie (1970) which appear to indicate that it is significantly different from what is known of the Pakeha child's socialization experiences. It is hoped that enough has been said here of the latter process to illustrate its course particularly with regard to those aspects where it and the Maori process appear to differ most. However, in writing of the 'Pakeha' process here it is acknowledged that no cognizance has been taken so far of variations within that category. Variations which need to be noted are mostly those due to or associated with 'social class' or socio-economic status. The stylised, over-simplified process described above might be better referred to as being more like the 'middle-class' pattern, but discussion of these points will be taken up again at a later stage. For the moment the aim has been to delineate what appear to be some essential differences between the Maori and the Pakeha styles of child-rearing.

In summary, it has been suggested that the Maori child-rearing methods differ on two counts from those of the Pakeha:

- (a) In Maori families there is a less intense, less exclusive, less<sup>possessive</sup>, emotional atmosphere, but that atmosphere, although diffused, is characterized by a level of emotionality which is more demonstrative and less inhibited. Nor is the boundary separating the Maori nuclear family from the rest of the kin group so rigidly defined.
- (b) Maori families, whether consciously or unconsciously, tend actively to instigate a process of emotionally and physically weaning each child at an early age, say about 2-4 years.



Thereafter, the child's socialization is largely (or at least to a much larger extent than with Pakeha children) the responsibility of his slightly older sibling-peer group.

From this very generalized picture various implications for later social behaviour seem to follow logically and in the next section of this chapter these will be developed, but at this stage it seems desirable to reiterate the qualifications made at the start of this chapter about the generalizability of the study upon which the above picture has been based.

In terms of the number of families studied the evidence certainly seems rather slight, however, it must be remembered that this weakness is at least partially offset in three ways. Firstly, the method followed by Ritchie and his co-workers: intensive interviews and extended observations by experienced social scientists could be expected to produce considerable depth of insight. Secondly, that a satisfactory level of insight was achieved seems to be shown by the supportive comments of many writers in this field, eg. Ausubel, 1963. Schwimmer, 1966. St George, 1970. Thirdly, there are several field studies carried out in other parts of Polynesia which contain observations on child-rearing methods very similar to those described by Ritchie (See Ritchie and Ritchie 1970. 134-138.)

#### IMPLICATIONS OF DIFFERENT CHILD-REARING METHODS.

Of these differences in child-rearing behaviour which have been described, it could be said that they are differences of degree rather than of kind. This might well be so, in fact it is very likely that the differences are decreasing as the level of intermarriage and general social interactions increase. However, it is argued here

that the difference in child-rearing is of such a nature that, for a high proportion of Maori families, the social behaviour of Maori youngsters is likely to be strongly affected by this type of socialization.

Making use of the Reference Group Theory terminology of R.K. Merton (1957), M. Sherif (1956), I. Newcombe (1950), R Kemper (1968) and others, it could be said that the behaviour of Maori and Pakeha children could be different because, as they learn to function socially, they are relating to different sorts of reference groups. These reference groups possess different characteristics and they make different demands on their members, thus in the long term they tend to produce different sorts of behaviour by those members regardless of whatever other reference groups they might relate to later.

Some useful concepts appear when the Ritchies' data is reinterpreted into a Reference Group framework. As regards the Pakeha child, his parents remain his primary reference group, virtually unchallenged for the first five years. Typically, his siblings and playmates remain less important to him than do his parents, who exercise predominant control during this period.

For the Maori child on the other hand, the position is presumed to be different. His parents are displaced by the sibling-peer group as his primary reference group at a much earlier age than in the case of the Pakeha child. Ritchie and Ritchie 1970 suggest this happens somewhere between two and four years of age. Factors which could have a bearing on this would be: the child's sex and birth-order, the availability of siblings or of sibling-substitutes such as cousins either living nearby or brought to live with the family to act as siblings, the availability of suitable other children eg. neighbours' for the same purpose and the availability of older people to help care for the young children.

It is from these children rather than the parents that the Maori child learns his set of social behaviours. He is strongly influenced by their ideas of what is appropriate in given situations as he absorbs their system of norms, values, sanctions and rewards. Thus do they fulfill the 'normative function' of a Reference Group (H.H. Kelley, 1952). In the opinion of L. Mann (1969), the extent to which this normative function of the group is effective depends largely on the degree to which the individual identifies with the group, although Kemper (1968) points out that it does not matter whether the actor ie. the child, complies willingly or not. The norms are effectively functioning even when he conforms with reluctance.

The child enters a relationship with these older siblings initially because of pressure from his mother, as noted earlier, which 'pushes' him away from her and forces him to seek his satisfactions from his older siblings. In other words, he embarks on a process of 'anticipatory socialization' (Merton 1957) by which he orients his behaviour to the new set of norms appropriate to the new group. His acceptance into the new group will depend to some extent on the accuracy of his perception of the group's values as well as on the appropriateness of his performance in adapting his behaviour. The small child, being totally inexperienced, proceeds in a trial and error fashion. Unfortunately, the responses he receives are likely to be unreliable guides for his future efforts because of their inconsistency, coming as they do from other quite young children who themselves will have had little experience of firm, consistent and rationally based guidelines. His efforts at anticipatory socialization are therefore, then and later, more likely to be aimed at conforming to his perception of his peers' requirements from moment to moment, rather than trying to understand and codify whatever rational basis there might be to his reference group's behaviour.

In fact, his lack of opportunity to learn by practical experience the business of developing a logical and consistent basis for relating to other people could have important repercussions later when approaching other groups with a view to seeking membership. At any rate, it seems likely that having to rely on other children as models rather than on his parents could produce a very different set of outcomes. Although the nature of the outcomes and their subsequent effects can only be suggested speculatively they appear to be psychologically plausible and also to lead in the direction of the particular sort of befriending behaviour mentioned in Chapter One.

The lack of opportunity to experience the need to comply with adult-defined rules due to the displacement of his parents as his primary reference group has already been noted. The implications of this situation could be further amplified. Regardless of the details of the rules, if they originate from adults (eg. the parents in a nuclear family) they are less likely to be capricious, inconsistent and contradictory than if they are imposed by other children. Another point is that being required to learn adult-set rules might accustom the child to defer to the parents, then adults generally, with better grace. It seems reasonable to think that the association of these two factors in the child's mind: adult authority figures in general combined with rationally based rules, might pave the way for a realization by the child of the value to himself of law and orderliness.

Conversely, in the absence of any such system of lawful restrictions, or at least in a situation where such proscriptions are devalued or rejected, the child is likely to become attuned primarily to the need for his uncritical acceptance of the demands made on him by the

members of his group. This habit of ready, unquestioning compliance is ingrained in him from an early age, reinforced by a variety of emotional as well as physical pressures bearing on him because of his dependence on his peers. It is very likely that he will develop into what Riesman (1950) has called the 'other-directed' person. The child is rewarded emotionally (by being accepted as a group member, a 'good mate') for observing the group's norms. The loneliness brought about by the group's rejection is a substantial sanction because of the child's inability or unwillingness to 'buck' both the group's and the parents' norms concerning his appropriate behaviour. His dependence on the group renders him vulnerable to the sanction of their disapproval. Alongside this threat, the sanctions of adults are of little avail because his early experience has led him not to look to them for support or approval. A tendency to reject, devalue, or, even at a milder level to be neutral to, entering meaningful relationships with adults would have the effect of rendering the child even more dependent on preserving his status with the group. It has just been said above that the child will tend to develop into an 'other-directed' person, but it can be seen that the 'other' doing the directing can only be someone who has status in the child's eyes. His experiences will have tended to produce for him a pattern of association with others which will restrict contacts with adults in favour of greater contacts with his peers. Ritchie bears this out when he comments critically on the inconsistent, harsh and arbitrary measures used by many Maori parents. "What children learn from such a pattern is chiefly to avoid adult contact." (Ritchie and Ritchie 1975.8)

The general thrust of the argument here is that during the period of his early formative years, the Maori child typically experiences a variety of pressures or influences which tend to enhance the importance in his view of

his peer group and to diminish the potency of parental control and hence that of other and later authority figures. If this conclusion can be accepted it would also seem reasonable to assume that Maori children would be inclined to exhibit behaviour which would indicate that they regard peer friendships differently from Pakeha children. It could be said perhaps that for the former the peer group has a stronger claim than the family to be the 'primary group' whereas for the Pakeha child the nuclear family is much more likely to be the primary group.

This reduced influence of the adults on Maori children has its effect also in another direction. For children from those families where the nuclear family is a strong unit, the development of the children's interests in recreational activities is often fostered in varying degrees by the explanation, encouragement and participation of the parents. This parental interest promotes a stability which helps the child over the 'sticky patches', encourages the perseverance which might produce greater competence, which in turn rewards efforts and boosts self-esteem. Parents also may encourage the child's association with other youngsters of similar interests. As a result of these experiences, the child becomes accustomed to accepting guidance and direction from adults; to mixing with other children for the sake of the instrumental value of enjoying a particular activity.

In this last paragraph an idealized picture of the possibilities of which the nuclear family is capable, has been presented rather than what the actuality probably is. It is suggested that for the Pakeha child and in particular the middle-class child, the influence of the parents is a substantial factor in the matter of recreational activities, just as it is generally in the child's life. While it probably does not function as effectively as the last paragraph would



suggest, parental influence must be considered as a factor of some potency in many Pakeha families.

If this picture represents the extreme at one end of a continuum, then the picture showing the other extreme should also be drawn to illustrate the effects of peer group predominance.

Without the experience of the sort of parental support described above, the child is not likely to persist with those activities involving extended learning or mental or physical effort of any kind. The dissatisfactions produced by early failures will tend to stultify further effort unless they are counterbalanced by rewards or some other form of emotional support. The provision of these forms of support is most likely to come from someone (such as a parent) who derives some satisfaction from the resulting extension or development of the child. The peer group, by contrast, has little or no vested interest in promoting extended effort by its members for the sake of activities which possess no immediate gratification for those members. To suppose otherwise would be to introduce an element of forward planning or farsightedness which would not be consistent with the picture of the peer group developed thus far. The characteristics of the peer group of Maori children are believed to be such that the group as a whole and the members individually considered, will tend to drift rather aimlessly among those activities requiring the least amount of organization, planning and disciplined effort. Relationships with parents are believed to be insufficiently developed to permit either the giving or the receiving of the emotional or physical assistance necessary to sustain extended and productive recreational activities.

The effects of these divergent viewpoints or styles of association will naturally vary widely. Once again, it can be seen that experiences with the 'Pakeha' nuclear family will tend to predispose the child brought



up therein, to be in favour of small social groupings, each built around some centre of interest which acts as a sustaining force. The within-family experience is added to by family controlled or guided movement into recreational activities. To such families, participation in aimless group or 'gang' combinations is likely to be seen as potentially, if not actually harmful and hence to be discouraged strongly. The Pakeha child, right through the pre-adolescent period is retained to a considerable extent within the 'sphere of influence' of his own nuclear family. The factors which tend to make him feel comfortable with small social groups and with groups which have an 'ongoing' basis, i.e. some permanent stability have been noted. These factors are proposed as plausible contributing influences to the hypotheses to be developed later.

In strong contrast to this situation, the influences on the Maori child which bear on him most strongly come from the peer group. Lacking parental guidance with regard to recreation in earlier years, after beginning school he becomes much less susceptible to their influence. (See St George 1970). Instead, he will tend to seek guidance in this as in other matters from the members of his peer group rather than from adults. In order to retain and preferably enhance their status, group opinion leaders are likely to adopt 'way out', extreme, anti-authority positions and the status of other members will depend on their being not far behind the leaders.

The rather starkly definite terms in which these descriptions are couched may suggest a degree of uniformity within each group much greater than is intended. Likewise, the suggestion of polarization between groups is probably overstated, but the aim has been to exemplify important differences between the child socialization methods of each ethnic group.

Ritchie appears to have delineated an essential and distinctive feature of the Maori socialization process. While it cannot be said to encompass the whole of the child's socialization, perhaps it can be said to epitomize those aspects of Maori child-rearing which still make a Maori child behave differently in some respects when compared with Pakeha children despite all the existing pressures towards conformity with the Pakeha norms. The fact that Ritchie's description appears to have received a considerable measure of support from other writers in this field seems to argue a case for the validity of his generalization. On the other hand the support might be due to the plausibility of an explanation of which the main attraction is that it does not directly criticise Pakeha institutions.

Be that as it may, Ritchie's observations and conclusions provide the theoretical foundations for some of the factors considered relevant to this comparison of Maori and Pakeha patterns of friendship behaviour. The general tenor of Ritchie's findings presents grounds for a strong suggestion that if a difference between Maori and Pakeha children in this respect can be shown to exist, then an ethnically related difference in child-rearing practices could possibly be at least partially responsible. Whatever the actual findings of the empirical investigation, any conclusions must be tentative because of the lapse of time from the early socializing experiences to the time of the survey at the Form One level. Allowance must be made for the effects of other influences in the intervening period and as these could be almost infinite in number the present enquiry must be restricted to a few examples of the most likely types.

In the next chapter some of the longer term effects of these child-rearing practices will be examined, as will the effects of those social influences chosen for comparison.

### CHAPTER THREE

#### THE HYPOTHESES

Ritchie's intensive study and portrayal of the socialization processes as they occur in Maori and Pakeha families provide a base upon which to speculate about the effects of a few more years of such processes on the children involved, in particular, to try to answer the question; how might their friendship behaviour differ at around say, the age of eleven or twelve? In this chapter these speculative answers are developed into hypotheses which can be tested empirically. It is assumed that the characteristic Maori and Pakeha child-rearing practices described in Chapter Two will continue consistently so that various other inferences may fairly be made about the behaviour of Maori and Pakeha children. The aim is to build up a hypothetical case for the influence of the family socialization practices, but at the same time to examine the possible effects of other influences.

#### MAORI CHILDREN

The Maori child, it is argued, is more likely than the Pakeha child to emphasize (quite unconsciously) 'warmth' or emotionality in his relationships with those around him. As Ritchie (1963) said of the children at Rakau, 'a cold, logical approach to others is negatively valued.' From Maori adults as well as children, the Maori child will develop the attitude that a warm, uncritical, accepting response to other people is to be valued more highly. He is thus more likely to act as though the generation of this sort of atmosphere matters more than either the intellectual content or the emotional complexity of his relationships. To him, the value of his friendships is perhaps better measured in terms of their capacity for providing him with

immediate satisfactions rather than say, those satisfactions to be gained from long-term material or other instrumental gains.

It is likely that the Maori child's major psychological 'need' (in Maslow's (1954) terminology) is for uncritical, undemanding support from his group. Uncritical and undemanding that is, with regard to external standards or future goals, but requiring from him in return reciprocal support, group loyalty and compliance with group norms based on close identification with the group.

It is also surmised that (among other possible factors) the small level of parental contact (emotional support, verbal interaction) that he has experienced, has produced inadequate learning and development of some physical and perceptual skills (Clay, 1970). Various social competencies (Maori as well as Pakeha) also may have been inadequately learned due to parental ignorance, apathy or rejection, in turn due perhaps to the effects of discrimination against Maori cultural values and practices in years gone by. (Walker, 1974. Royal and Tapiata, 1974).

After starting primary school, his early and continuing experiences there of mixing in a wider community with different values, including often a disparagement of Maori values (Colgan, 1972) will no doubt have brought home to him his many inadequacies (in the eyes of others) and in particular, produce many frustrations for him in his dealings with Pakeha adult authority figures.

He is faced with having to deal with a combination of strange adults with unfamiliar requirements based on different value systems and a demanding educational programme, individualistic and highly competitive. On top of this, his willingness to tackle these hurdles is sapped by his awareness of the low expectations of his

parents and teachers (Garrett, 1973. Walker, 1974). Beset with these pressures, he is likely to continue to prefer to associate with those of his peers whose interests and needs are similar to his own and who provide relief and/or escape from unpleasant social pressures.

Because of his learning from an early age to be dependent on a group rather than on one person (his mother), it will probably seem more 'natural' to him to continue with casual, diffuse and extensive relationships with many people, ie. with a wide-ranging group. It would seem less 'natural' and hence more difficult to become involved with only a few in relationships which could become intense, complex and sustained and thus likely to demand a strong commitment from him.

To digress slightly for a moment, it would also seem to follow from this line of reasoning that two other possible styles of behaviour would be even more difficult for him. Because of his dependence on the goodwill and moral support of the group, he would be unlikely to pursue actions that might undermine his standing with the group. Loss of status or ostracism would be particularly hard to bear. The two courses of action which he might find hardest, could be either to 'side' with adults against the group (ie. to betray the group to teachers or the police) or to follow an individualistic line of action (eg. to study hard at school). This particular course would be especially disloyal as it would run counter to the group ethos on two counts, it would be seeking the favour of adults ('sucking up') and it would be asserting that school achievement mattered more than 'staying with my mates.'

A further point which could be made is that the example and the demands of all those who comprise his peer group would provide reinforcement for him, as he sees them pursuing the same type of easy-going, demonstrative but undemanding relationships. If he is

the 'other-directed' person he is believed to be, it would be expecting too much for him to take easily to another and diametrically opposed pattern of friendship, viz. that of small groups, intensely personal and persistent (Hermansson, 1974). Even to contemplate such a course would involve discarding old values in favour of new ones and withstanding the ridicule and abuse of old associates. The prospective rewards would need to be considerable.

According to Aronfreed (1968) children are more likely to imitate (and the element of imitation is important here) the behaviour of the parental or peer model where there is a history of nurturant or rewarding interaction with the model. A similar point is put somewhat differently by Bandura and Ross (1967), when they say that it is the controller or mediator of resources who is the main source of imitative behaviour. Viewed from either of these approaches, the Maori child's peer group may be seen to be in a position to exert considerable pressure on his behaviour, while he lacks the psychological resources to combat that pressure, even if he wished to.

As in Chapter Two little attention has been paid so far to the influence of sex differences in this analysis, not that they are not important, but because emphasis has been placed on the explication of the ethnic differences in broad terms. The Maori form of socialization described by Ritchie would seem to give much greater freedom to Maori girls than that experienced by Pakeha girls (although possible social-class differences in this respect will be noted later). Following Ritchie's argument, it seems likely that for Maori girls, peer group influences would tend to over-ride parental influences at a much earlier age than for Pakeha girls, although possibly not to the same extent as for Maori boys.



PAKEHA CHILDREN

Contrasting with the above generalized description of the Maori child is the generalised picture of the Pakeha child. He grows up in a small nuclear family. (In this survey, the mean sizes of Maori and Pakeha families are 6 and 3 children respectively). He is less likely to have contacts with other relatives, and is socialized in small groups. He is accustomed to being involved with adults as well as children in intense relationships by years of close and frequently ambivalent association with his parents (mainly the mother) and with (usually) only a few siblings. Prior to starting school he is used to having his mother constantly supervising his activities and mediating his new experiences (Ritchie and Ritchie 1970). The friendships he forms are more likely to be influenced by his parents' wishes, (his sister's friendships even more so). For him, the claims of friendships must compete with strongly expressed family wishes. He becomes accustomed to a pattern of friendship-making characterized by having choices limited by adult controls. As he reaches outside the family for companionship (especially after starting school) he is likely to seek and to respond to a similar style of association to that which he has experienced hitherto within the family. As his potential friends will tend to come from similar backgrounds (parental influence again), it will be a case of like reinforcing like, as it was among the Maori children.

The Pakeha child will probably have much less experience than the Maori child of free and easy mixing, unimpeded by watchful maternal restraints. On the other hand, it must be remembered that the Maori child's apparently greater freedom of action is not necessarily conducive to independent action. His freedom from parental control is obtained at the cost of control by the group. Because of the nature of his socialization the Pakeha child is more likely to develop competency



in a greater variety of social skills, learning (to appear) to conform to adult requirements, in particular. This ability to relate to adults in a reasonably satisfying way (for adults as well as children), insofar as it does develop - and obviously it does not develop equally satisfactorily for all Pakeha children - should tend to reduce dependency on the peer group. A reduced dependency on the peer group in turn should allow the child a feeling of having more options open, of being able to use friendships to further a wider range of personal goals or interests. The way is thus open for the child to place a longer-term and an instrumental value on his friendships. This alternative, of course, is more 'useful' in a society which places a higher value on material aspects of life than on such vaguely sentimental notions as the cultivation of personal relationships or attention to family responsibilities and obligations.

In contrast to the comments made above about the assumed slight effects of the sex differences among Maori children, it seems likely that Pakeha parents might exercise much more control over daughters than over sons (Houston, 1970). Ritchie and Ritchie (1970) note this tendency in the mothers of four-year olds and it seems reasonable to assume that it might be accentuated as daughters approach puberty. If this is the case then the friendship behaviour of Pakeha girls would tend to reflect this pressure. One possible reflection of this pressure could be in the direction of smaller and less frequently changed friendship networks.

From these generalised statements two sets of possibilities may be predicted about the styles of friendship behaviour Maori and Pakeha children might adopt. Generally speaking, Maori children will tend to make more friendship choices than Pakeha children.

That is, they are more likely than Pakeha children to express the desire to be associated with a greater number of children. Putting this in an empirically testable form, it could be said that when children in say, Form One, are asked to list the names of their friends, Maori children will tend to write down the names of more children than will Pakeha children.

HYPOTHESIS ONE: Maori children will choose more friends than will Pakeha children.

Conversely, it is argued that the friendship choices of Maori children will be more likely to change over a fairly short period. The grounds for this belief are that it seems likely that one effect of their experience of group upbringing is that individual associations or relationships as such might be valued less than the ability and willingness to relate to others in general. One's individuality matters less than one's incorporation in the group. Patterns of association possibly reflect the ephemeral needs of the moment tempered by the need to think that one is well regarded by one's peers. The presumed lower level of interaction with adults (which, it could be inferred, would entail a lower level of positive affective influence) might mean that the children concerned would not place the same value as adults on stable relationships or the sustained effort required to maintain and develop such relationships. Alternatively, those adults on whom they are likely to model themselves (mainly Maori), would have grown up experiencing similar cultural constraints. Therefore, even as adults they might not value stable relationships to any great extent.

As far as the Pakeha children are concerned on the other hand, the effect of their sort of socialization as described here is likely to influence them towards

more durable relationships within smaller groups. Taking into account the number of friends chosen in the first place, Pakeha children will display greater persistence than Maori children in sustaining friendships. This forms the basis for the second hypothesis.

HYPOTHESIS TWO: Pakeha children will make proportionately fewer changes in their friendship choices than will Maori children in the same time.

In effect, these two hypotheses assert that regardless of the influences of whatever other differences there might be within each group, Maori and Pakeha, overall there will remain a significant difference between the two ethnic groups in the size and level of persistence of friendship networks.

However, while this predicted difference, if it should be found to exist, may be of some interest, the effects of other variables in the social environment cannot be ignored. It is both possible and necessary to analyse further the relationships between the primary difference and a selection of variables each of which, it may be presumed at this stage, exerts some regularizing influence on the children's friendship behaviour.

#### CRITERIA FOR SELECTION OF OTHER INDEPENDENT VARIABLES

Aspects of the environment which could conceivably affect the friendship (or other) behaviour of children are virtually infinite in number. The aim here is to select a few, against which the presumed influence of ethnicity will be weighed. As the number must be

restricted to keep the investigation within manageable proportions, some suitable criterion must be found for selecting variables. An appropriate organizing device would seem to be the nature of the ethnic variable itself. It is assumed at present that this influence is connected in some way with the life of the family, ie. with the social interaction within the family. If Maori children are found to differ from Pakeha children with respect to friendship behaviour, it would be hard to find an influence better placed to produce this effect. Working on the assumption that the ethnic influence operates within the family the Type of alternative variable which should be considered should also function in the same sphere.

A second criterion should be that the variables chosen should cover (or be in a position to cover) some of the more significant dimensions of family life for both Maori and Pakeha families.

A third criterion is aimed at relating the investigation to other research dealing with other aspects of Maori-Pakeha differences. In his review of recent research in this area, Harker (1973) summarizes some determinants of Maori educational achievement suggested by various writers. While the subject of this thesis may be related to educational achievement only very indirectly, there may be some point in using variables considered by others to have some potency or at least some plausibility in that area. Those variables considered most suitable for selection besides ethnicity are:

1. Size of family;
2. Proximity of relatives;
3. Parents' socio-economic status.

These three variables also meet the first two criteria very well. To them may be added a fourth, the Child's Sex, which is also significant because of the obvious difference in sex-role training and hence

in the social experiences of boys and girls in both Maori and Pakeha cultures.

The five independent variables chosen all have two important advantages as far as this project is concerned: firstly, each one provides a question which should be readily answerable by school children; and secondly, the nature of each variable is such that it is possible to form meaningful dichotomies within them quite easily. The variables are designed to discriminate among the children on the basis of their possession of different characteristics: eg. being a boy in a large Maori lower SES family.

Ethnicity is one possible source of variance between groups of children and the other four variables chosen also provide categories within which some uniformity of experience may be expected and between which considerable differences of experience are likely. The other four variables seem to have no prima facie relationship with ethnicity, such that any particular correlation might be expected between them and ethnicity. On the other hand, there are no real theoretical grounds to justify an assumption that Maori and Pakeha children when placed together in any one of the other categories will behave in identical fashion because of their common membership in that category. In other words, it is likely that the three environmental variables plus sex may not operate in similar fashion within both ethnic groups (ie. there will be an interaction effect).

#### SEX OF THE CHILD

This is the only variable to provide a natural dichotomy. It is expected that boys in general will display a different pattern of friendship behaviour from girls due mainly to the clearly defined sex roles which prevail throughout both Maori and Pakeha societies,

permitting boys greater freedom from adult controls. There are differences certainly, between the ethnic groups in this respect, but each in its own way tends to socialize girls and boys differently. It has been suggested above that for Maori girls, peer group membership and influences permit a level of freedom Pakeha girls do not possess. However, it is not expected that this difference between Maori and Pakeha girls will outweigh the difference between girls and boys across the whole sample.

The procedure followed from this point on is that the first two hypotheses in each group of three state the direction predicted for a particular variable while the third hypothesis is intended as a check on the consistency of the findings across both ethnic groups.

HYPOTHESIS THREE: Boys will choose more friends than girls.

HYPOTHESIS FOUR: Girls will display more persistence in sustaining friendships than boys.

HYPOTHESIS FIVE: The results of hypotheses 3 and 4 will be similar within both the Maori and the Pakeha sub-samples.

#### FAMILY SIZE

Basically, the question being explored here is the probable effect on friendship behaviour of having either a small or a large number of siblings in the nuclear family. For instance, is it possible that Pakeha children brought up in large families might have similar experiences to those of young Maori children

within the sibling-peer group, and as a result display friendship behaviour similar to that of Maori children? There seems little doubt that the socialization of young children in small families could be different from that in large families. Might the presumed cultural basis of the Maori child-rearing methods be, instead, a modern, practical answer to the growth in size of Maori families in this century? (Compare Young and Willmot, 1973, for comments on child-rearing methods in large families in Britain). A comparison of the scores from children in large and small families, Maori and Pakeha, may throw some light on these questions. The working assumption on which the next set of hypotheses is based is that the child's experiences in a large family help to develop, or are related to, attitudes in favour of large friendship groups.

But what constitutes a large family? The survey provides continuous data (number of children in the family) on this point. The technical problem is to change this continuous data into two or more artificial groups. Kerlinger (1964) justifies this, stating that categories should be set up according to the research problem. Clearly, life in a one-or-two child family could be very different from life in say a family with more than six children, but the differences would tend to disappear in the middle range of families. This problem can be met in either of two ways. A middle group could be excluded, leaving the two extremes, or, an arbitrary division can be made somewhere in the centre. Another criterion which must be considered is that there must be an adequate number of cases in each category. Mainly for this latter reason, two categories will be formed - Large and Small Families - with the cut-off point between the fourth and fifth child. A division here has a further advantage in that it is midway between the mean sizes of Maori and Pakeha families, viz,



6 and 3 children.

HYPOTHESIS SIX: Children in large families will choose more friends than children in small families.

HYPOTHESIS SEVEN: Children in small families will be more persistent in their friendship choices than children in large families.

HYPOTHESIS EIGHT: The results of Hypotheses 6 and 7 will be similar within both the Maori and Pakeha sub-samples.

#### PROXIMITY OF RELATIVES

As in the last section, the aim here is to try to determine the effects on friendship behaviour of having relatives living nearby in approximately the same age group. After siblings; cousins, uncles and aunts of similar age, living in the vicinity, would constitute a pool of potential playmates for both Maori and Pakeha children not available to those children, Maori or Pakeha having no relatives living nearby. For Maori children, such a group would (or could) be the modern equivalent of the extended family (whanau). In earlier, tribal times such a group would usually have lived in close proximity (Firth, 1959). Is such an influence still functioning today? If so, to the extent that it 'blurs' the boundary around the nuclear family? Once again, will any difference in friendship behaviour be revealed? Pakeha children having relatives nearby have the opportunity at least, to participate in something like the extended family relationships and to acquire similar attitudes to friendship. (Metge, 1964, Kawharu, 1973).

Some practical limitations of this variable should be mentioned. A rather arbitrary boundary was fixed at around thirty miles from the town and this was specified to the children by naming places. The boundary has some rough relevance to tribal associations, geographic features and the town's present sphere of influence. Children unable to write down the names of any relatives living in this area are classified as having 'No Relatives'. Children who write any names (even one) are classed as having relatives. It is obvious that the information contained in the data has many limitations. The dichotomy so formed can only be said to give a rough approximation of the overall picture, thus a cautious interpretation of the data is required in this case.

HYPOTHESIS NINE:

Children having relatives living in the district will choose more friends than children having no relatives living in the district.

HYPOTHESIS TEN:

Children having no relatives living in the district will be more persistent in sustaining friendships than children having relatives in the district.

HYPOTHESIS ELEVEN:

The results of Hypotheses 9 and 10 will be similar within both the Maori and Pakeha sub samples.

### SOCIO-ECONOMIC STATUS

Socio-economic status, as a means of classifying people for social science research is widely used in studies of urban, industrial societies.

However, the attribution of status hierarchies and the differential effects on life-styles of occupying various positions on a socio-economic status (SES) based hierarchy can become misleading in social situations involving ethnic minorities. MacDonald (1975) and Garrett (1973) draw attention to the tendency to adopt too readily an SES 'explanation' for Maori behaviour (eg. Gregory, 1974). The fact that most Maori families can be classified as Low SES (Walsh, 1973) does not necessarily mean that membership in this category of itself is the primary cause (or even that it is the most significant) of certain characteristics and behaviours often attributed to Maori people. (Bray, 1973).

Harker (1976) notes that this view is also disputed by several Maori writers (eg. Walker, 1973), who may be, presumably, more sensitive to some of those influences affecting Maoris which arise from historical or cultural sources. Maori and Pakeha members of the lower SES group may appear superficially to behave in similar ways, but it is possible that the underlying motives could be very different. As mentioned earlier, this study does not purport to be able to investigate the sources of individual behaviour. Nevertheless, it is possible that the statistical method being employed may be able to show that individuals, when grouped according to the different characteristics covered by the independent variables will form different behaviour patterns, at least as far as the criterion variables are concerned.

In this case, a pattern presented by children from Low SES Maori families, significantly different from that of Low SES Pakeha children could be taken as an indication that experience within the Maori family still has some quality distinguishable from the Pakeha, despite the similarity presumably imposed by membership of the same SES group.

There is still the question of just what membership of say, the lower SES group means even for Pakeha people. How accurately life styles related to any particular SES level in New Zealand do in fact compare with the same level in other industrial countries may be perhaps, too easily taken for granted by New Zealand writers, even when referring only to citizens of European descent (ie. Pakehas). Some of the problems which might arise can be overcome by restricting the comparison to a basic level.

One level that seems appropriate is that described by Kohn (1974), writing about U.S. conditions. As he puts it, being on one side or the other of the line which divides manual from non-manual workers has profound consequences for how one rears one's children. Apparently a significant difference exists (in the U.S.A.) each side of this line with regard to parents' values and in particular to parents' conceptions of what characteristics they desire in their children. This manual - non-manual distinction could be said to coincide approximately with that other well-known distinction between working class and middle class. (see Musgrave, 1965, Shipman, 1968, for reference to English conditions).

The manual non-manual dichotomy is relevant in this study for three reasons. Firstly, when the classification is compared with the Elley-Irving (1972) scale of occupations, a corresponding division can be made between Levels 3 and 4 on that scale.

Secondly, enough Maori fathers (20% in this survey) have jobs which rank above this cut-off point, to enable the analysis to proceed adequately.

Thirdly, it could be fairly surmised perhaps, that Maori parents included here in the High SES group might display some at least of the supposedly appropriate characteristics of a Pakeha 'middle class' or upper SES group. The sorts of characteristics considered relevant are: more than a minimum formal education, strong personal ambition, adherence to middle-class aspirations ('possessive individualism' Connell, 1972), experience of exercising responsibility, initiative and contingency planning. It is possible, at any rate, that Maori High SES families would be, in terms of the distinctions of life-style usually applied to Pakeha families, more akin to a High SES Pakeha group than a Low SES Pakeha group.

The main question to be answered by this analysis is where the children of high SES Maori families score in relation to the other groups. If their group mean is close to that of the High SES Pakeha group, this could be taken to indicate that their experiences within their families are similar to those of the High SES Pakeha group. The inference could be taken a step further (cautiously), to suggest that those Maori parents might be tending to subscribe more strongly to Pakeha 'middle class' values. On the other hand, if their group score is still close to that of the Low SES Maori group, several interpretations seem equally likely and no clear picture emerges. These represent some of the possibilities to be investigated by testing the following hypotheses.

HYPOTHESES TWELVE: Children from Low SES families will choose more friends than children from High SES families.

HYPOTHESIS THIRTEEN: Children from High SES families will be more persistent in their friendships than children from Low SES families.

HYPOTHESIS FOURTEEN: The results of Hypotheses 12 and 13 will be similar within both the Maori and Pakeha sub-samples.

The series of Hypotheses 3-14 are intended to assess the respective effects of four environmental variables which will be experienced by all the children in one form or another. In this first stage of the analysis, the effect of each of these variables is measured separately, using Student's t-test (Kerlinger, 1964). The aim is to see whether the two ethnically based sub-samples diverge significantly from each other on either of the two criterion variables:

- (a) Size of friendship network, or
- (b) Persistence of friendship choices.

The interactive effects of these four variables and ethnicity are analysed under the final hypothesis using Multiple Regression analysis, a statistical method designed to apportion the effects of several independent variables on a given criterion variable. More specifically in this case, it allows an examination of the effect of Ethnicity on size and persistence of friendship groups after controlling for any effects due to the three environmental variables and sex. This procedure forms the basis for the final hypothesis.

HYPOTHESIS FIFTEEN: When entered last in a Stepwise Multiple Regression Analysis, ethnicity will make no significant

contribution to variance  
within the Dependent  
Variables.

A significant rejection of the null hypothesis will be necessary before ethnicity can be accepted as a probable contributor to differences in friendship behaviour.



## CHAPTER FOUR

### METHODOLOGY

This chapter begins with a brief resume of the development of the thesis to the point where the hypotheses have been prepared and the details of the questionnaire to be completed by the children have been decided upon. This is followed by some references to matters affecting the way the survey was carried out in the schools. The main section of the chapter deals with the statistical procedures used in the analysis of the data.

The early development of this research project from its initial stages has been described in Chapter One. From the first casual impressions were derived the two criterion variables. The decision was made to use them as indicators which might reveal the presumed cultural influence. The need for care in distinguishing between the Maori and the Maori/Pakeha categories in particular has also been emphasized. If any behavioural difference between Maori and Pakeha does still exist, it should be most clearly discernible in those families where both parents are Maori.

Other variables have been selected partly on the basis that their sphere of influence is also centred within the family, and partly because some of their effects on children's behaviour might be confused with 'Maori' behaviour. These, together with ethnicity, comprise the Independent Variables. The most appropriate form that the Survey could take was decided after consideration of a variety of factors. Finally, the steps taken progressively to formulate the most suitable hypotheses have been described in Chapters Two and Three.

This next section describes some of the more important events which affected the administration of the survey in the schools. (Appendix One describes in detail the actual procedures followed in the classrooms).

### THE SURVEY IN THE SCHOOLS

Permission to undertake the survey was obtained from the Education Board and the Principals of the Intermediate schools concerned. The first survey was carried out during the second week of the school year, and the second took place near the end of the second term. The Principals and the teachers involved were most co-operative and obliging.

Few difficulties were encountered in the classrooms. It was found that time was saved by writing up on the blackboard the names of many people, schools, occupations and places rather than having to spell out repeatedly the same names. Practically all children seemed to understand quite easily what was required and carried out instructions quickly and sensibly. It was thought advisable to give quite a lot of help with the spelling of names, otherwise the later identification of friends could prove difficult. (If Tom had three friends, all called Bill and no surnames were given.....?) No complaints from either parents or children resulted from the enquiries about the ethnic status of parents (or about any other aspect of the survey).

Some problems did arise because in two cases classes were totally reorganized between the first and second surveys, with children being distributed through many other classes. As a result, a lot of time had to be spent trying to trace where children had come from

and gone to. This could have been avoided if two other precautions had been observed.

1. The questionnaires should have had a space left for the teacher's name and room number.
2. Enquiries to the school office and to teachers at the time of the second survey would have facilitated the tracking down of the children who had moved.

The number of individuals finally left in the survey declined from the original 923 names to 806, mainly due to children being away on one or other of the days. Possibly some of these children could have been located and asked to complete the survey, but this would have meant a further inconvenience for the schools and as the number of individuals already obtained seemed substantial, nothing was done about them. The number of Maori boys in the survey is only 43 compared to 71 Maori girls. This discrepancy suggests that perhaps a significant number of Maori boys has been lost from the survey, but unfortunately the numbers were not known until much later when the organisation of the data began.

Each child's first and second forms had to be placed together to count the number of names recorded twice. As there was nothing on the forms to indicate the ethnic origin of the child's friends, it was not possible to categorize friends by ethnic status. This is regretted as it would have provided very useful information (if it were accurate), but the omission was deliberate as undue (and perhaps invalidating) attention to the matter of ethnicity was to be avoided. All the information on the forms was grouped and recorded by classes, in a manner which would facilitate the coding and transfer of the data.

to I.B.M. computer punch cards.

### COMPUTER ANALYSIS

The analysis of the data was carried out using S.P.S.S. routines (Statistical Package for the Social Sciences.) on the Burrough's B6700 installation at Massey University.

Specific routines used in this study were:

- Codebook. for basic frequency distributions and descriptive statistics where appropriate.
- Crosstabs. to produce contingency tables for nominal data.
- Breakdown. used to breakdown scores on interval data variables by the selected nominal categories. It produces means and standard deviations for each of the nominal categories from which the t-tests are calculated.
- Regression. the step-wise option was used to determine the relative contributions of the various independent variables to the dependent variables: Size and Persistence of the friendship groups.

### STATISTICAL PROCEDURE

The statistical procedures used in a research project should be selected to suit the research design, which in turn must fit the task being undertaken. (Kerlinger 1964). Before describing the statistical methods used (and presenting the data drawn from them) it is necessary to relate task, design and statistical method.

In a true scientific experiment, the usual procedure is to start with several variables (all of which are usually known about in some detail), manipulate them under controlled conditions and then draw conclusions. If necessary, the experiment can be repeated.

In this case, as frequently happens in social science research (Kerlinger 1964), certain events happen, or appear to happen and it becomes necessary or seems desirable to know something about the cause or causes. Unlike the controlled experiment, the only thing that is known (or surmised) is the outcome. The researcher's task is to look back over the myriad prior events, trying to trace cause and effect. In this case again, there is no way of knowing beforehand, even whether any sort of 'Maori' influence exists, or, if it does exist, what form it might have.

There appear to be two suitable approaches. Firstly, through the literature, to search for theories, generalized descriptions and earlier research. Secondly, by trying to distinguish, mainly through statistical methods, some form of behaviour common among Maoris, but much less common, or, possibly non-existent among non-Maoris.

However, it must be noted, these are logically independent exercises and any answers derived from either approach should only be applied very cautiously to the other. The end condition (friendship behaviour that is different for ethnic reasons) might or might not be noticeably different. It is hoped that the statistical methods used might provide some sort of answer to that question, but more difficult is the task of inferring what form the supposed Maori influence might take, and the statistics will not help with that.

While a hypothetical 'cause' has been proposed, there is no way of knowing (within this particular piece of research) whether the 'cause' does represent the real situation. There is a logical 'gap' which precludes the possibility of proving here that the central theory (about child-rearing) is the actual operative mechanism by which the 'Maori' influence is transmitted and perpetuated. It may be virtually disproved if the results of the statistical analysis indicate that its influence, or more correctly its relationship, with the criterion variables is negligible or not significant. However, even if this does not happen, the theory can only be regarded as no more than a tentative, if plausible guess.

The best 'assistance' that the use of the statistical methods might offer is to indicate that the fact of ethnic origin co-varies with friendship behaviour to a statistically significant degree beyond the range of chance probability. Or, alternatively, to show conclusively that there is no correlation at all between them, thus removing the possibility that variations in friendship behaviour are related to differences in child-rearing methods or anything else which could be connected in any way with ethnic origins.

Such considerations place this particular research study squarely within the 'ex-post facto' category and hence subject to all the limitations and weaknesses of such research, (Kerlinger 1964. 359-373). The most relevant of these weaknesses is the 'post hoc, ergo propter hoc' fallacy; in this case, the temptation to want to establish a causal relationship on less than compelling evidence, between an antecedent event, eg. a particular form of socialization, and a later event, differences in

friendship behaviour. Related to this is the danger of thinking in terms of 'single cause - single effect' when the facts of the case clearly point to the strong possibility of there being a battery of complex, multiple relationships between a whole array of events of which these two mentioned above are probably only a part.

These problems are common in 'ex-post facto' research but the point is that the practical requirements of this particular substantive issue act as a strong influence towards that type of research. As Kerlinger puts it (1964. 373), many "social scientific and educational research problems do not lend themselves to experimentation, although many of them do lend themselves to controlled inquiry of the 'ex-post facto' kind."

The key word in this quotation is probably 'controlled' as it is possible to improve the quality of this sort of research by the careful selection of variables and by the introduction of rigorous controls wherever possible to reduce the effects of either random or systematic error. However, these measures are not easy to implement as a brief discussion of some of the problems will illustrate.

Stated simply, the Dependent Variable (D.V.) 'Friendship' is believed to be influenced by a variety of antecedent (and possibly current as well) conditions and events, the Independent Variables (I.V.). Some of these, especially those considered likely to be more significant are specified and the attempt is made to measure their respective influences. It is desirable to make this a two-step process to increase the level of control.



The first step should be to postulate some sort of 'plausible' explanation or line of reasoning from each of the presumed significant events to the Dependent Variable. In other words, hypotheses are set up on the basis of inferences deduced from aspects of the antecedent conditions. As a minimum, these hypotheses should have the appearance at least of being derived by sound logic and psychology from a firm theoretical base and supported by previous research. Ideally also, the implications should lead directly to empirically testable behaviour. The hypotheses should preferably indicate if possible, the direction of the change in behaviour believed to be attributable to each Independent Variable in turn, rather than simply stating that some un-specified change is possible. This paves the way for more rigorous testing of each hypothesis and is thus in itself a valuable form of control.

The second step deals with attempts at measuring the effects of each independent variable. It has to be remembered that these variables are not manipulated in the same way as the independent variables in a true experiment, where it is possible (theoretically at least) to hold all the other variables constant except the one whose influence is being measured. In such a case, whatever change occurs in the dependent variable may be attributed to that particular I.V. with some degree of certainty. In ex post facto research no such control is possible. The fact has to be accepted that the outcome is due only to the hypothesized independent variables but also probably to other unsuspected influences. All the nominated variables together may only account for a small part of the variance, or at worst, for none of it.

Another control possible in the true experiment is the random allocation of subjects to each condition, thus reducing if not eliminating, the possibility of extraneous systematic differences among subjects affecting the results. In ex post facto research, again, randomization is impossible. Subjects are allocated to groups on the basis of their possessing certain attributes which are assumed to be significant. Here the assumption must be made that between-group differences in the results may be attributed to the presumed effects of those attributes, whereas it could be that the relationship is spurious, the effect in fact being due to some other influence or influences.

These differences between the true experiment and ex post facto research point up the need to use a measuring technique suitable to the needs of the latter; one that can control for the effects of several variables simultaneously. Furthermore, it is desirable that the method be capable of handling both 'interval' and 'nominal' variables. In the light of these considerations, the method which seems most appropriate is Multiple Regression Analysis (M.R.A.). While this method is very suitable for complex comparisons, it is not necessary to use it for preliminary analysis of alternative variables. As the first operation here involves a comparison of means and standard deviations in order to measure the significances of the differences between groups, it is sufficient to use the t-test (Kerlinger 1964. 258.) The variables, Sex, Family Size, Proximity of Relatives and SES. are divided into two conditions each and the scores provided by these groupings taken in turn, when compared with the two conditions of ethnicity, enable means and standard deviations to be calculated. This process considers the effects of ethnicity on the categories within each variable. Using the variable Sex as an example; within the

category Boys, the scores of Maori and Pakeha are compared. The t-test measures the significance of the difference.

It has been stated earlier that in ex post facto research in particular, no firm conclusions can be drawn about the correctness or otherwise of the results. What can be done through the use of statistics however, is to demonstrate that one 'cause' is much more likely to be the case than any other. If a relationship between the two variables, 'cause X' and 'result Y' occurs repeatedly in a variety of contexts, to the extent that such an occurrence can be predicted with a high level of probability, then it may be permissible to speak with some degree of certainty of 'X' being the 'cause'. But it is important to remember that the degree of certainty and level of probability are relative. Further research might show perhaps, that the presumed relationship is spurious, or another 'cause' with an even closer relationship might be discovered.

In the present case, the main research hypothesis concerns the relative 'Size' and 'Persistence' levels of the friendship groups of Maori and Pakeha children. It is not sufficient proof that a difference exists, if it is demonstrated only once in a straight Maori-Pakeha comparison. Such a difference could be caused perhaps, by the differential distribution of Maori and Pakeha children on some other variables, eg. Family Size or SES.

If, after controlling for the effects of each variable, a statistically significant ethnic difference is still apparent, further support is lent to the main hypothesis. This approach has influenced the formulation of the hypotheses. Using the variable 'Sex' again as an example; it has been proposed that Boys will have more friends than Girls,

(Hypothesis 3) Hypothesis 5 then states that Maori and Pakeha scores will be similar. 'Similar' here must be understood as meaning within the range of chance or random variation. Before any ethnic influence might be presumed, the difference between groups (eg. Maori and Pakeha boys) would have to be statistically significant, having regard to the size of the sample.

Because the aim in this research project is to see whether ethnicity does exert an influence on behaviour over and above the influence of other variables, a statistical difference in favour of ethnicity must be treated with caution. Referring to the form of Hypothesis 5, for example, to assert that ethnicity does make a difference is to reject the null hypothesis. Use of the null hypothesis carries the implication that the two samples have been drawn randomly from a common population, hence a statistically significant difference between them may have some theoretical significance.

Consideration must be given to the consequences of a decision in favour of such a possibility, in case the decision is wrong. 'Type I' errors are usually considered to be more serious than 'Type 2' (Ary, Jacobs and Razavieh. 1972), as they involve a change in the status quo. A researcher, putting forward a proposition for investigation, should treat a positive finding with great caution. Once again referring to this case, instances of an 'ethnic' difference exceeding the .001 level, occurring on all tests might be acceptable as adequate grounds for rejecting the null hypothesis, with proportionately greater caution as the weight of statistical support declines.

However, it is likely that the results will be rather mixed, and so the t-test results will need to be interpreted carefully. The function of the t-test is to measure the between-group differences of the group in pairs, because the effects of the variables are being considered singly. As this does not represent reality very closely, it is necessary to examine their interaction effects as well, measuring their relative contributions to the total variance. Only in this way, can something of the complexity of the real situation be captured. This particular function is performed by multiple regression analysis.

#### MULTIPLE REGRESSION ANALYSIS

Kerlinger and Pedhazur (1973) in their informative treatment of the subject, point out in detail the virtues of this technique with respect to ex post facto research in particular. These comments are worth recording here because in this thesis this method is used as the definitive measure of the influence of the variables as well as a corrective for the deficiencies of the t-test. Such reliance on its use requires some support as to its efficacy. For instance, on p.429, they say,

"Multiple Regression Analysis (MRA) can handle both experimental and non-experimental studies and data, especially when they are used together. It is especially well-suited to explanatory studies of the ex post facto type using non-experimental data."

(p99)"The explanation of the variance of the dependent variable comes by indicating the relative contributions of the independent variables to the prediction of the dependent variable."

(p83)"MR provides ways of achieving control statistically over various independent variables and their effects so that their relative influences can be assessed."

Basically, multiple regression analysis achieves its purpose by comparing the means and variances of the different variables, just as does the t-test, but it is also able to measure the effect of a particular I.V. after controlling for the effects of other I.V.'s as well as indicating how much of the variance is still unaccounted for. After the correlation coefficients have been calculated, that variable which correlates most closely with the criterion variable is entered first into the regression procedure and the others follow in order. The table produced indicates the contributions of each variable singly after partialling out the effects of the other independent variables. In this way the different effects of the independent variables may be studied. The precise physical or chemical controls of the natural sciences are replaced (in effect) by control through statistical manipulations.

Multiple regression analysis permits two types of comparisons of means and these extend rather than coincide with the two step process mentioned earlier. The first type of comparison of means comprises all those planned by the researcher as theoretically derived hypotheses prior to the actual analysis. These are the 'a priori' comparisons. The second type is comprised of the 'post hoc' or 'a posteriori' comparisons. Treatment of these comparisons should always follow the rejection of the null hypothesis for each of the planned comparisons, ie. after each of the substantive hypotheses has been accepted as statistically significant. The test of

the a priori comparison is more powerful than that of the post hoc comparisons, (Kerlinger and Pedhazur, 1973. 131). This increases the explanatory power of those comparisons which can legitimately be included in the planned comparisons as their theoretical justifications have already been propounded. Nevertheless, it must be remembered that these theoretical supports are basically still only plausible inferences and, while the use of M.R.A. does add useful extra support, there can be no question of the case being exalted from probability to certainty. The reason for this of course is that however plausible the case, there is still the chance that there may be some other unconsidered 'explanation' or contributory factor.

As many as possible of the factors considered likely to exert some influence should be included among the independent variables as for another reason which has to do with the total variance of the dependent variable. Using M.R.A. it is possible to partial out among those independent variables nominated, their respective influences on the dependent variable, but as it is highly unlikely that all the relevant factors would be nominated (as independent variables) there would usually be (possibly inevitably) an unexplained residual error or variance. In principle, this error margin is reducible by identifying as many sources of systematic variance as possible (Kerlinger and Pedhazur 1973. 155) although, as might be expected, only those variables exerting a significant influence theoretically, would contribute substantially to the reduction of the error margin.

The function of M.R.A. then is to indicate the relative contributions of the independent variables to the variance of the dependent variables, but it (M.R.A.) cannot of itself specify or even suggest the nature of the independent variables. What they might be will depend on the original theoretical formulations which



which have already been set forth in Chapters Two and Three. Brief descriptions of the variables follow.

#### NATURE OF THE INDEPENDENT VARIABLES

The five independent variables differ in nature. They have all been formed into dichotomies, but Child's Sex is the only true one. Ethnicity has been made dichotomous by removing those of the population not classified as being either Maori or Pakeha (as defined herein). Family Size is dichotomous, but created artificially from continuous data, and probably not from a normally distributed population, insofar as the mean sizes of Pakeha and Maori families are about 3 and 6 children respectively. SES has been formed into two groups based on an approximate Manual-non Manual distinction using the Elley - Irving Scale of Occupations. Once again, the distribution of Maori and Pakeha children on this scale is disproportionate. Presence of relatives seems at first sight to be a straightforward nominal dichotomy, but when their effects are considered in relation to the research task, the difference between the two conditions is not clear cut. Having one cousin 20 miles away in the country is not quite the same as having 20 cousins one mile away. The criteria for allotting children to the categories have been described in Chapter Three.

#### NATURE OF THE DEPENDENT VARIABLES

The two criterion variables, 'Size' and 'Persistence' (of friendship groups) are the result of translating the original impressions about friendship behaviour in the play-ground into a testable form. These two aspects were operationalized by

asking the entire Form One age cohort to write down the names of their friends on two separate occasions. The number of friends listed on Survey One was assumed to be representative or typical of each child's preferred 'Size' of group as he or she faced the new school situation.

From both lists of friends (from the two surveys) the number of those names which occurred twice was obtained. Using this number as the numerator and the number of friends chosen on the first list as the denominator, a ratio 'score' was calculated for each child to provide a measure of the 'Persistence' displayed by that child in retaining friendships.

It could be argued perhaps that the second survey would be a more reliable guide to each child's typical preferred size of friendship group as he has had time by then to settle into the new school situation. It is possible that the Maori children (as a group) could be more affected by the transition than the Pakeha children, for example, they might feel more nervous, more ill at ease, more 'whakama' as Walker (1973) has suggested. However, it can only be speculated as to whether this would result in artificially depressed scores (explained as being due to feelings of inhibition) or artificially increased scores (due to the need to compensate for feelings of inadequacy). The size of the increase of each group might throw some light on this point (see the discussion following Table One in Chapter Five).

### FORMAT OF THE HYPOTHESES

Once the decision was made to use two separate criterion variables it became necessary to test each independent variable for two separate effects, in other words to duplicate the layout of hypotheses. Hypotheses 1, 3, 6, 9, and 12 relate to 'Size', while 2, 4, 7, 10 and 13 relate to 'Persistence'. Hypotheses 5, 8, 11 and 14 check on the levels of similarity between the ethnic sub-samples. Each of these latter hypotheses has two parts, (a) and (b). (a) relates to 'Size', and (b) to 'Persistence'.

### STATISTICAL PROCEDURES

Using the S P S S Breakdown routine, the scores on the criterion variables are broken down by the selected nominal categories of the independent variables. Means, standard deviations and variances of these scores are calculated. T-Tests are performed to produce probability statements about the significance of the between-group and within-group differences of these scores. In this phase the variables are considered singly in relation to ethnicity. In the second phase, M.R.A. produces data on each variable while controlling for the others. The results of these analyses, in conjunction with the hypotheses to which they relate, will be presented in the next chapter.

## CHAPTER FIVE

### RESEARCH RESULTS

The results of the data analysis presented in this chapter follow the order in which the hypotheses were formulated in Chapter Three. T-tests and probability statements are given for all comparisons, including Maori-Pakeha comparisons within categories. Hypotheses One and Two were designed to test the original research question as first formulated, and the subsequent hypotheses examine, firstly, the effects of the other four variables as each is introduced separately, and, secondly, the effect of each variable while the others are controlled for so that the unique contribution of each may be measured.

Hypotheses One and Two look at the basic comparison of the friendship behaviour of the Maori and Pakeha children from two different perspectives using the criteria of 'Size' and 'Persistence' (of friendship groups), and they ignore the possible influence of other variables. Consequently the data they provide appear to establish a highly significant relationship between ethnicity and friendship behaviour.

HYPOTHESIS ONE: Maori children will choose  
more friends than Pakeha children

TABLE ONE

Number of friends chosen by Ethnic group.

Survey One

Ethnicity	N.	M.	S.D.	t	p
Maori	119	8.899	3.463	6.016	<.001
Pakeha	429	6.755	3.433		

Survey Two

Maori	119	11.8	4.699	5.495	<.001
Pakeha	429	9.317	4.264		

The data in Table One provides strong support for Hypothesis One, the number of friends chosen by Maori children substantially exceeding the number chosen by Pakeha children in both surveys. The number of friends chosen shows a considerable increase from the first survey to the second in both groups although the difference between the means of the two groups widens from 2.15 to 2.5. The increase of the Maori mean being 37.9% and of the Pakeha, 32.6%.

This widening gap draws attention again to the point raised in Chapter Four as to which survey provides the more suitable base upon which to make any comparisons. Choice of the first survey in this project seems justified on the ground that it has produced the smaller difference in means, ie. it is a more conservative estimate of an ethnically based difference in friendship behaviour.

HYPOTHESIS TWO: Pakeha children will display more persistence in retaining friendships than Maori children.

TABLE TWO:

Number of names on both lists as a Ratio of total names on First list.

<u>Ethnicity</u>	N.	M.	S.D.	t	p
Maori	119	.305	.182	3.679	<.001
Pakeha	429	.402	.271		

In Table Two, support for Hypothesis Two is at a slightly lower, but still very significant level, with Pakeha children retaining a much higher ratio of the friends chosen in their first lists, even though the size of their friendship groups increases at a rate proportionately equal to that of the Maori children.

The persistence of their friendship groups appears to be of much greater importance to the Pakeha children.

### CHILD'S SEX

Hypotheses Three and Four examine the possibility of differences in friendship behaviour being associated with different patterns of socialization for girls and boys. It was hypothesized that as both Maori and Pakeha boys customarily receive a greater level of freedom than the girls of either group, the boys would have larger friendship groups while the girls would be more persistent in retaining friends.

HYPOTHESIS THREE: Boys will choose more friends than girls.

TABLE THREE

Number of friends chosen by Sex.

#### Survey One

<u>Sex</u>	<u>N.</u>	<u>M.</u>	<u>S.D.</u>	<u>t</u>	<u>p</u>
Boys	274	7.193	3.731	<0	n.s.
Girls	274	7.248	3.620		

#### Survey Two

Boys	274	9.540	3.950	<0	n.s.
Girls	274	10.178	4.944		

The data presented in this table show that Sex does not discriminate effectively with respect to size of friendship group, there being no appreciable difference between boys and girls in either survey. The hypothesis receives no support against the null alternative.

HYPOTHESIS FOUR: Girls will display more persistence in retaining friendships than boys.

TABLE FOUR

Number of names on both lists as a ratio of Total names on First list.

<u>Sex</u>	<u>N.</u>	<u>M.</u>	<u>S.D.</u>	<u>t</u>	<u>p</u>
Boys	274	.421	.648	<0	n.s.
Girls	274	.381	.617		

Hypotheses Four also receives no support. It seems clear from these tables that Sex is not a significant variable with respect to either criterion.

Hypotheses Five examines the effects of controlling for ethnicity on each criterion (a) 'Size' and (b) 'Persistence' in turn, of the variable Sex.

HYPOTHESIS FIVE: (a) The results of Hypothesis Three will be similar in both Maori and Pakeha sub-samples.

TABLE FIVE

Number of friends chosen by Sex after controlling for ethnicity.

Survey One

<u>Ethnicity</u>		<u>BOYS</u>	<u>GIRLS</u>	<u>t</u>	<u>p</u>
Maori	N	48	N 71		
	M	9.021	M 8.817	.314	n.s.
	S.D.	3.756	S.D. 3.275		
Pakeha	N	226	N 203		
	M	6.805	M 6.700	.006	n.s.
	S.D.	3.617	S.D. 3.225		
	t=3.829	<.001	t=4.752	<.001	



Survey Two

Ethnicity	BOYS		GIRLS		t	p
Maori	N	48	N	71		
	M	10.938	M	12.408	<0	n.s.
	S.D.	3.727	S.D.	5.198		
Pakeha	N	226	N	203		
	M	9.243	M	9.399	<0	n.s.
	S.D.	3.928	S.D.	4.617		
	t=2.739	<.01	t=4.572		<.001	

The data in Table Five show no significant differences between boys and girls in either ethnic group occurring in either survey. As this result is similar to that obtained for Hypothesis Three, Hypotheses Five (a) is retained.

By contrast, when the differences between Maori and Pakeha in this table are examined, they are found to be highly significant. In other words, the ethnic difference observed in the data in Table One is maintained after controlling for Sex.

HYPOTHESIS FIVE (b): The results of Hypothesis Four will be similar in both Maori and Pakeha sub-samples.

TABLE SIX

Number of names on both lists as a ratio of Total names on First list.

Ethnicity	BOYS		GIRLS		t	p
Maori	N	48	N	71		
	M	.317	M	.279	<0	n.s.
	S.D.	.617	S.D.	.193		
Pakeha	N	226	N	203		
	M	.443	M	.411	<0	n.s.
	S.D.	.279	S.D.	.263		
	t=3.014	<.001	t=3.349		<.001	

The data in Table Six show that the pattern of non-significant relationships between sex and friendship behaviour revealed in Tables Three, Four and Five is continued. As the results of Hypothesis Four are similar in both Maori and Pakeha sub-samples, Hypothesis Five (b) is retained.

As in Table 5 it is noticeable that when sex is controlled for, the ethnic difference is clearly maintained (at the .001 level).

#### FAMILY SIZE

In Chapter Three it was predicted that the number of siblings in a family would influence friendship behaviour; the larger the number of siblings, the more friends likely to be chosen. Conversely, it was argued that the level of persistence in retaining friendships would be in inverse relationship to the number of siblings. Accordingly, Hypotheses Six and Seven were formulated to test these predictions.

HYPOTHESIS SIX: Children in large families will choose more friends than children in small families.

#### TABLE SEVEN

Number of friends chosen by Family Size.

##### Family Size      Survey One

	N	M	S.D.	t	p
Large	200	8.080	3.578	4.282	<.001
Small	348	6.727	3.443		

##### Survey Two

Large	200	11.175	4.836	5.345	<.001
Small	348	9.103	4.077		

Hypothesis Six is strongly supported in both surveys, indicating a significant relationship between family size and preferred size of friendship group.

HYPOTHESIS SEVEN: Children in small families will be more persistent in retaining friendships than children in large families.

TABLE EIGHT

Number of names on both lists as a Ratio of Total names on first list.

Family Size	N	M	S.D.	t	p
Large	200	.383	.229	1.267	n.s.
Small	348	.421	.273		

The data in Table Eight indicates a trend in line with the direction predicted but it does not reach a significant level, therefore it must be concluded that Hypothesis Seven is not supported. As in the data relating to the first two variables it is apparent that the two criteria 'Size' and 'Persistence' do not necessarily move together.

Hypothesis Eight examines the effects on the two criteria of controlling for ethnicity. In Chapter Three the question was raised whether Pakeha children in large families might in fact have similar experiences to those attributed to Maori children and that **their** friendship behaviour might therefore be similar. It was felt that the converse might also apply.

HYPOTHESIS EIGHT (a): The results of Hypothesis Six will be similar in both Maori and Pakeha sub-samples.

TABLE NINE

Number of friends chosen, by family size after controlling for ethnicity.

		<u>Survey One</u>			
		LARGE	SMALL	t	p
Maori	N	92	N 27		
	M	9.130	M 8.111	1.349	n.s.
	S.D.	3.540	S.D. 3.117		
Pakeha	N	108	N 321		
	M	7.185	M 6.611	1.506	n.s.
	S.D.	3.369	S.D. 3.448		
	t=3.975	<.001	t=2.168	<.05	
		<u>Survey Two</u>			
		LARGE	SMALL	t	p
Maori	N	92	N 27		
	M	12.000	M 11.185	.701	n.s.
	S.D.	4.749	S.D. 4.453		
Pakeha	N	108	N 321		
	M	10.472	M 8.923	3.292	.001
	S.D.	4.821	S.D. 3.393		
	t=2.249	<.05	t=2.279	<.05	

The data presented in Table 9 show that the clearly significant difference in friendship behaviour related to family size as presented in Table 7 has been reduced below the .05 level of probability, except for the Pakeha families in the second survey where a large difference prevails. Further inspection of the data shows that in each survey, although the means of both large and small Maori families are larger than the mean of the large Pakeha families, the latter mean score is much closer to them than it is to the mean of the Pakeha small family category. This suggests that the every-day experiences in a large Pakeha family might

not be too dissimilar from those in Maori families, both large and small, as far as conditions affecting friendship behaviour are concerned. Even so, conditions in small Maori families are apparently still more closely related to a preference for large friendship groups than those in large Pakeha families. It could be inferred from this perhaps, that there is some influence being exerted (related to their being Maori?), which is not present in the large Pakeha families. Nevertheless, the gap that has occurred between the means of large and small Pakeha families does represent a break from the clear Maori-Pakeha distinction which has been the case hitherto.

Summarizing the results in Table 9, it appears that Hypothesis 3 (a) lacks sufficient support to be retained. The highly significant differences reported for Hypothesis 6 in Table 7 are reduced to non-significant levels in three cases out of four in Table 9. Hypothesis 3 (a) is therefore rejected.

HYPOTHESIS EIGHT (b): The results of Hypothesis Seven will be similar in both Maori and Pakeha sub-samples.

TABLE TEN

Number of names on both lists as a Ratio of Total names on First list.

Ethnicity	LARGE	SMALL	t	p
Maori	N 92	N 27		
	M .320	M .256	<0	n.s.
	S.D. .190	S.D. .145		
Pakeha	N 108	N 321		
	M .437	M .426	<0	n.s.
	S.D. .251	S.D. .278		
	t=3.665 <.001	t=3.120 <.01		

Hypothesis 7 was not supported and the data in this table are consistent with that result. The slight relationships recorded in Table 10 are negative for both ethnic groups and although the t-test result for the Maori sub-sample approaches the .05 level of probability, it is not accepted as significant. The data in Table 10 are considered to indicate that the results for both ethnic groups are similar to the results for Hypothesis 7, therefore Hypothesis 8 (b) is retained.

Once again the strong Maori-Pakeha difference shows through in every one of the six ethnic comparisons made in Tables 9 and 10. It is apparent that although Family Size does contribute to the relationship with friendship behaviour, its effect is insufficient to reduce the effect of Ethnicity below a level of statistical significance.

#### PRESENCE OF RELATIVES.

This variable is concerned with the effect on the child's friendship behaviour of having or not having relatives living in the district. It was postulated in Chapter Three that the presence of relatives would be conducive to, or at least, be related to a preference for a wider friendship group. Conversely, having no relatives present would relate to smaller friendship groups and more persistent friendships. Hypotheses 9 and 10 have been formulated to examine these propositions.

HYPOTHESIS NINE: Children with relatives present will choose more friends than those with no relatives present.

#### TABLE ELEVEN

Number of friends chosen by Presence of Relatives.

Survey One

	N	M	S.D.	t	p
Kin	239	8.134	3.559	6.037	<.001
No Kin	309	6.515	3.380		

Survey Two

	N	M	S.D.	t	p
Kin	239	10.862	4.653	4.656	<.001
No Kin	309	9.084	4.256		

The data reported in Table 11 show very substantial differences in size of friendship groups between the 'Relatives Present' and 'Relatives not Present' groups (Kin and No Kin). These are of similar proportions to the differences noted in Tables 1 and 7. The hypothesis is strongly supported.

HYPOTHESIS 10: Children with no relatives present will display more persistence in their friendship choices than those with relatives present.

TABLE TWELVE

Number of names in Both lists as a Ratio of  
Total names in First List.

	N	M	S.D.	t	p
Kin	239	.354	.230	3.479	<.001
No Kin	309	.437	.276		

Unlike the result for Family Size shown in Table 8, in this case, the presence or absence of relatives is strongly related to friendship behaviour. Both Hypotheses 9 and 10 are supported at the .001 level, thus making it the only variable apart from



ethnicity to receive such a degree of support on all three measures. Clearly a very close relationship exists between Presence of Relatives and Friendship behaviour.

HYPOTHESIS 11 (a): The results of Hypothesis 9 will be similar in both Maori and Pakeha sub-samples.

TABLE 13

Size of friendship group, by presence of relatives after controlling for Ethnicity.

Survey One

	KIN	NO KIN	t	p
Maori	N 102	N 17		
	M 9.039	M 8.059	1.083	n.s.
	S.D. 3.461	S.D. 3.845		
Pakeha	N 137	N 292		
	M 7.460	M 6.452	2.937	<.01
	S.D. 3.494	S.D. 3.360		
	t=3.469	<.001	t=1.946	<.05

Survey Two

Maori	N 102	N 17		
	M 11.961	M 10.941	.827	n.s.
	S.D. 4.895	S.D. 4.210		
Pakeha	N 137	N 292		
	M 10.044	M 8.897	2.432	<.01
	S.D. 4.303	S.D. 4.210		
	t=3.201	<.001	t=2.367	<.01

The data reported in this table show no significant differences within the Maori sub-sample, but within the Pakeha group, the differences in both surveys are significant at the .01 level. Again it appears that while the presence of relatives does not discriminate effectively among the Maori children, it does among Pakeha children. It may be noted here that the results for Pakeha children with kin present show a tendency toward the Maori pattern. The results of Hypothesis 9 and not similar within both ethnic groups, therefore Hypothesis 11(a) is rejected.

HYPOTHESIS 11(b): The results of Hypothesis 9 will be similar within both Maori and Pakeha sub-samples.

TABLE 14

Number of names in both lists as a Ratio of  
Total names in First list.

	KIN	NO KIN	t	p
Maori	N 102	N 17		
	M .309	M .285	<0	n.s.
	S.D. .171	S.D. .247		
Pakeha	N 137	N 292		
	M .338	M .446	2.072	<.05
	S.D. .262	S.D. .274		
	t=2.651 <.01	t=2.367 <.01		

Table 14 shows no significant difference within the Maori sub-sample but a moderately strong level of support for the Hypothesis within the Pakeha sub-sample. This difference between the ethnic groups requires that Hypothesis 11 (b) also be rejected. Statistically significant differences between the ethnic groups may be noted in all cases when presence of relatives is controlled for.

SOCIO-ECONOMIC STATUS.

The disproportionate representation of Maori families on the lower levels of the socio-economic hierarchy has been noted earlier, as have comments to the effect that some behaviours regarded as Maori, should be better regarded as being related to membership of the lower SES group. The next three hypotheses are intended to examine these suggestions with reference to friendship behaviour.

HYPOTHESIS 12: Children from Low SES families will choose more friends than children from High SES families.

TABLE 15

Number of friends chosen by SES.

Survey One

SES	N	M	S.D.	t	p
High	211	6.995	3.455	<0	n.s.
Low	306	6.977	3.491		

Survey Two

High	211	9.650	4.879	1.085	n.s.
Low	306	10.079	4.069		

The data reported here indicate that SES does not discriminate effectively between children with respect 'Size of friendship group. The hypothesis receives no support, therefore it is rejected.

HYPOTHESIS 13: Children from High SES families will display more persistence in retaining friendships than children from Low SES families.

TABLE 16

Number of names in Both lists as a Ratio of total  
names in First list.

SES	N	M	S.D.	t	p
High	211	.433	.268	2.123	<.05
Low	306	.384	.249		

In this table the data show a stronger relationship between SES and friendship behaviour than the data in Table 15 which is the reverse of the situation which has prevailed with the other variables. Hypothesis 13 is supported.

HYPOTHESIS 14 (a): The results of Hypothesis 12 will be similar in both the Maori and Pakeha sub-samples.

TABLE 17

Number of friends chosen by SES after controlling  
for ethnicity.

Survey One

Ethnicity	HIGH		LOW		t	p
Maori	N	21	N	91	2.356	<.05
	M	7.905	M	9.066		
	S.D.	2.948	S.D.	3.558		
Pakeha	N	190	N	215	<0	n.s.
	M	6.895	M	6.851		
	S.D.	3.499	S.D.	3.420		
	t=1.461	ns.	t=5.117	<.001		

Survey Two

	N	21	N	91		
Maori	M	11.429	M	11.857	.370	n.s.
	S.D.	5.662	S.D.	4.555		
	N	190	N	215		
Pakeha	M	9.453	M	9.326	<0	n.s.
	S.D.	4.762	S.D.	3.857		
	t=1.283	n.s.	t=4.965	<.001		

The data in this table is of interest because it contains the first and only time in this study that a significant difference within the Maori group is found. The level of the High-SES Maori score is much below that of the Low-SES Maori score and close to the High-SES Pakeha score. Although this does not recur in the Second Survey, it lends support to the idea that 'Maori' behaviour is not inevitably linked to Low-SES levels.

At least some Maori children in High-SES families may be experiencing conditions affecting their friendship behaviour similar to those experienced by Pakeha children. SES appears not to be related significantly to friendship behaviour for Pakeha children.

The within-Maori group difference in Survey One is of sufficient size to permit the rejection of Hypothesis 14 (a), although there may be factors in the timing of the first survey so soon after entering a new school which could make the second survey a more reliable guide to the children's typical friendship behaviour.

HYPOTHESIS 14 (b): The results of Hypothesis 13 will be similar within both Maori and Pakeha sub-samples.

TABLE 13

Number of names in Both lists as a Ratio of Total names in First list.

		HIGH	LOW	t	P
Maori	N	21	N 91		
	M	.261	M .385	< 0	n.s.
	S.D.	.153	S.D. .182		
Pakeha	N	190	N 215		
	M	.452	M .409	1.537	n.s.
	S.D.	.270	S.D. .266		
	t=3.148	<.001	t=2.751	<.01	

The data in this table indicate that SES is not related significantly to friendship behaviour insofar as 'Persistence' is concerned, when control is exercised for ethnicity. The significant result reported for Hypothesis 13 is not repeated here, although the t-test results noted above are approaching the .05 level. However, the reverse direction of the Maori score should be noted, as this suggests a wide gap between the groups.

Hypothesis 14(b) is therefore rejected.

To sum up the analysis so far, it appears that ethnicity is a dominant influence in both aspects of friendship behaviour when compared to the other variables chosen. When the conditions contained in the other four variables are controlled for, ethnicity may be seen to make a significant contribution 24 times out of 27. However, this effect occurs when the other variables are considered

singly. There have been trends visible which suggest that Family Size and Presence of Relatives may also be making significant contributions. It is possible that their combined effect could be even more important. Child's Sex and SES seem to have the least influence, but they may interact with the other variables in unsuspected ways.

To test for and to try to measure the unique contribution of ethnicity, as well as analyse the effects of the other variables, the data is put through a multiple regression analysis. For this purpose the following hypothesis has been formulated.

HYPOTHESIS 15: When entered last in a  
Stepwise multiple regression analysis,  
Ethnicity will make no significant  
contribution to the variance within  
the Dependent Variables.

Two stepwise regressions have been computed, one for each criterion, 'Size' and 'Persistence'. 'Size' will be considered first.



TABLE 19

Zero order correlation coefficients ( $r$ ) and variance estimates ( $r^2$ ) for variables used in the multiple regression analysis.  $r$  above the diagonal, and  $r^2$  below.

	Size	Pers	Ethn	Sex	Fam	SES	Rels
Size		.3101 <sup>++</sup>	.2279 <sup>+</sup>	.0188	.2147 <sup>+</sup>	.1147	.2306 <sup>+</sup>
Persist	.096		.1881	.0699	.1233	.1278	.1475
Ethnicity	.053	.053		.0888	.4498 <sup>++</sup>	.3551 <sup>++</sup>	.4475 <sup>++</sup>
Sex	.000	.004	.007		.0786	.0120	.1281
Family	.046	.015	.202	.006		.2387 <sup>+</sup>	.2779 <sup>++</sup>
SES	.005	.002	.126	.016	.021		.1648
Relatives	.053	.023	.200	.016	.077	.027	

+ significant with  $\alpha = 0.05$

++ significant with  $\alpha = 0.01$

The data in Table 19 show the correlations of the independent variables with the two criteria and with each other. Of immediate note is the size and contribution made by the variable 'Presence of Relatives', which has the highest ' $r$ ' with 'Size' and second highest with 'Persistence'. Family Size and Presence of Relatives rank closely with Ethnicity on 'Size' and they are also closely related to each other, indicating a high level of commonality, which was indeed suggested by the earlier analysis.

TABLE 20

Multiple regression analysis - 'Size'

Criterion - Size of friendship group

N = 763

R = 0.29910

 $R^2 = 0.08946$ F = 10.04138<sup>++</sup>

variable	Beta	F to delete	zero order variance accounted for	variance accounted for when entered last
Relatives	-.15	10.451	.053 <sup>+</sup>	.019 <sup>++</sup>
Family	.12	6.882	.046 <sup>+</sup>	.012 <sup>++</sup>
Ethnicity	.10	3.636	.053 <sup>+</sup>	.006
Sex	-.06	1.829	.000	.003
SES	.02	.287	.005	.000

+ significant with  $\alpha = 0.05$ ++ significant with  $\alpha = 0.01$ 

Table 20 presents the data for the regression relating to 'Size'. Surprisingly, Ethnicity, which seemed such a significant variable previously and which was also prominent in Table 19 has been shown to exert a very small independent influence (.006), while Presence of Relatives and Family Size both make contributions to the variance that are statistically significant. The zero-order variance of Ethnicity (.053) becomes greatly reduced due to its high level of commonality with these two variables. Only Sex and SES make smaller contributions to the variance. The decline in the relative importance of Ethnicity reveals the strength of the underlying, less visible relationship between 'Size' on the one

hand, and Presence of Relatives and Family Size on the other. While the data in Table 19 show the strong correlation between Ethnicity, Family Size and Presence of relatives, indicating their common influence, the data in Table 20 show that the significant contributions to 'Size' come almost entirely from the two latter variables. Ethnicity is, as it were, almost a passive passenger.

Turning now to the 'Persistence' criterion, it should be noted again that there were indications in the earlier stages of the analysis that Persistence and Size were affected differently by the independent variables. The nature of this difference is now clarified, firstly by the fact that the independent variables bear different correlations with the two criteria, (Table 19) and secondly, by the differences between the data in Tables 20 and 21.

TABLE 21Multiple regression analysis - 'Persistence'

Criterion - Persistence of friendship groups

N = 763

R = 0.21856

 $R^2 = 0.04777$ F = 5.12678<sup>+</sup>

variable	Beta	F to delete	zero order variance accounted for	variance accounted for when entered last
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Ethnicity	-.11	4.416	.035	.008 <sup>+</sup>
Relatives	.07	2.028	.022	.004
SES	-.07	2.112	.016	.004
Sex	-.05	1.187	.005	.003
Family	-.03	.451	.015	.000

+ significant with  $\alpha = 0.05$ 

In Table 21 Ethnicity not only makes the largest initial contribution, but also supports the earlier data with respect to 'Persistence', but more importantly, what is revealed here in both Tables 20 and 21, is the surprisingly small contribution, not only of Ethnicity but of all the variables chosen. In round figures, they account for less than 10% of the variance in the criteria. With respect to 'Size', only Presence of Relatives and Family Size are statistically significant independent contributors (at the .05 level). But in terms of theoretical significance, none of these variables could be said to reach meaningful levels.

It seems likely that variations between individuals in the sample far outweigh any systematic variations due to their membership of any of the I.V. categories used in this study.

Bearing in mind that Ethnicity does not make a statistically significant contribution to 'Size' at all, and that its contribution to 'Persistence', (although significant at the .05 level) has little theoretical value, it seems preferable to conclude that Hypothesis 15 should be retained.

## CHAPTER SIX

### INTERPRETATION OF RESULTS, CONCLUSIONS AND IMPLICATIONS.

In the last chapter, an operationalized version of the original impression that Maori children appeared to favour larger but more transitory friendship networks than Pakeha children was subjected to a statistical analysis. The aim was to assess the level of support for such an impression. The effects of ethnic origin and four other variables were compared by two different methods: in the first phase, each variable was considered in isolation, and in the second, all the variables were considered together.

The results of the analysis were conflicting. To present the picture briefly: the data from the first phase depicted ethnicity as being a variable having a strong relationship with friendship behaviour, whereas the data from phase two indicated that the influence of ethnicity was more apparent than real.

The aim in this chapter is to try to resolve the conflict between the two sets of data as a first step before endeavouring to reach some conclusions about the place of ethnicity as a correlate if not a determinant of friendship behaviour. To achieve the first part of this aim the data and the processes which produced the data will be critically examined, firstly, to see how the data might be interpreted so that the conflict or apparent conflict is explained, secondly, the processes and other aspects of the research will be examined to see whether, and in what ways, methodological defects might have affected the results. Finally, the conclusions will be studied to see what their implications for research might be.

Preliminary statement of the conflict.

To judge by the first phase data alone, it would appear that ethnic origin is a very important variable in determining children's friendship behaviour. It is the only one of the selected variables which discriminates consistently and significantly on the chosen criterion variables as far as the children surveyed are concerned, whereas of the other four variables only 'Presence of Relatives' receives anything like the same level of support. In fact, the distinction appears so clearly defined as to suggest, even to indicate beyond doubt, that ethnic origin must be making a difference to friendship behaviour. When a variable differentiates 24 times out of 27 (15 times at the .001 level and 6 times at the .01 level), there would appear to exist more than just a high level of correlation. By comparison, presence of relatives, the next most influential variable, seems unimportant in its effects, family size even less so, while the effects of the other variables seem quite negligible. If the analysis had stopped at this point, ie. after Hypothesis 14, a conclusion along these lines would have seemed quite acceptable, viz. that ethnicity does play a vital part in influencing the friendship behaviour of the children concerned. It would then have been tempting to move on to consider more closely the postulated differences in child-rearing methods and their effects on the formation of such behaviour.

However, when the effects of all the variables nominated are considered together and analyzed by a statistical process which simulates reality more closely than the simple analysis of variance used in the first phase, a very different picture emerges.



The data in Tables 19, 20 and 21 reveal three points not apparent from the earlier results. Firstly, both family size and presence of relatives have much more direct influence on 'Size' of friendship group than ethnicity. Secondly, although ethnicity is shown to have a greater influence than the other two variables above on 'Persistence', the influence of all three together on that criterion is small compared to the degree of variance unexplained. Thirdly, generalizing further from the last point and summing up the whole situation, the total effect of all five selected variables contributes very little to the variance of either criterion. The dominant position of ethnicity has completely disappeared.

How can this reversal be explained? Is the discrepancy due to defects in the methods of analysis? Perhaps the main reason lies in the limitations of the method used in the first phase.

#### The First Phase.

Hypotheses One and Two were designed to check on the original impressions formed in the playground, or rather, to be more precise, on their operationalized form, viz. the children's lists of friends. The hypotheses which followed were introduced to assess the effects of other aspects of the environment, but because of its limitations, the statistical method used should now be regarded as inappropriate. One of the primary assumptions on which Analysis of Variance is based is that there must be little or no correlation between the independent variables, ie. they really must be independent of each other. (Kerlinger 1964). However, in this case the correlations between some of the

variables are quite substantial. Categorization by ethnic origin tends to run parallel with (in varying degrees) some of the conditions of the other variables, eg. family size, presence of relatives and SES. The mean size of Maori families is approximately twice that of Pakeha families, viz. 6:3 children. 77% of Maori families are in the large family category compared to 33% of Pakeha families. 85% of Maori families have relatives present whereas only 32% of Pakeha families do so. 81% of Maori families are in the low SES group as against 53% of Pakeha families. Because Tables 1 and 2 do not show that Maori children also belong overwhelmingly to large families in the low SES group and have relatives living in the district, any or all of which could be contributing to the tendency to associate in larger groups, then conclusions based on these tables alone must inevitably be misleading. None of the variables selected, except Sex, is really independent of ethnicity.

Other weaknesses of analysis of variance when used in isolation are that it gives no indication that the effect attributed to ethnicity might actually be working through other variables, nor does it give any indication of the absolute or relative size of each variable's contribution to the variance, thus permitting the assumption that all the variance has been accounted for, especially when one variable seems as powerful as ethnicity did prior to the testing of Hypothesis 15. However, these methodological defects stand revealed by the use of multiple regression analysis.

### The Second Phase.

According to Kerlinger and Pedhazur (1973), multiple regression analysis 'explains' the variance of the dependent variable by indicating the relative

contributions of the independent variables, and is especially useful in ex post facto explanatory studies containing non-experimental data when the 'independent' variables may be related to each other to some extent. The data in Tables 19, 20 and 21 display measures of the effects of the 'independent' variables and hence provide a far more accurate picture of the relationships among the various influences than was possible from the first phase data alone. Even more importantly, the data indicate how much of the variance is not explained. This is probably the most valuable corrective of all. This analysis of the data shows clearly that the effect previously credited to ethnicity should actually be attributed to other agencies. Table 19 shows correlations between ethnicity on the one hand, and family size and presence of relatives on the other, of the order of .45 (.4498 and .4475) which are quite substantial. Table 20 records the manner in which the zero-order variance of ethnicity (.053) is reduced to .006 (presumably in favour of the other two variables and probably of SES as well).

These data when considered together suggest that while the relationship between ethnicity and the other two variables (family size and presence of relatives) seems quite strong, ethnicity itself has a very weak relationship with either criterion variable. In fact, the unique contribution of ethnicity is so small that its 'role' might be best described as being that of incidental correlate rather than it having any causative function. This is emphasized when it is noted that the use of M.R.A. reveals that the variance in friendship behaviour attributable to all the selected variables together is less than one quarter of the total variance of the criterion variables. A range of variables, here unidentified, must be responsible for the bulk of the variance.

While the association of a certain group of the categories, viz. Maori ethnic origin, large family, relatives present and low SES may appear to be more closely related than a group formed by their opposites (Pakeha, small family, no relatives present and high SES) the first group is certainly not exclusively Maori. The small unique contribution of ethnicity virtually refutes the possibility that this variable could be the prime instigator among the variables of a particular sort of friendship behaviour. Certainly the high correlation between Maori ethnic origin, large family and having relatives living in the district supports the popular notion that the two latter are Maori characteristics (in New Zealand at the present time), but the evidence obtained here indicates that the fact of being born a Maori or being brought up in a Maori family makes very little difference to a child's friendship behaviour.

If this conclusion can be accepted, then the significant factor among the variables selected seems to be the presence of large numbers of children available in the non-school environment as potential friends. This is supported by the way in which family size and presence of relatives supplant ethnicity in the regression analysis.

#### Tentative Finding

At this point it appears that ethnicity is related to children's friendship behaviour, not so much through a traditional, parent-derived child-rearing system but through the more or less continual presence of many other children due to the related factors of larger family size and the near proximity of a kin group. To the extent that Pakeha families share these characteristics then their children also tend to display

the same sort of friendship behaviour. This point is affirmed by the almost negligible unique contribution of ethnicity. If there is something distinctively Maori, in the sense of actual cultural (behavioural) differences, about Maori families, then it is not apparent from the data produced here. It must be assumed that it contributes little to the children's friendship behaviour.

### A Critical Appraisal of other Aspects of the Project

Before coming to a final conclusion as to whether the original question has been satisfactorily answered, it would be worthwhile to take advantage of hindsight and examine other aspects of the investigation seeking possible defects in design or methodology. Of major concern perhaps, is the use of an ex post facto design. Problems inherent in its use were discussed in Chapter Four. The possible effects of these limitations as they might affect this research should be examined. Generally speaking, the problem is usually one of deciding which one of the many possible antecedent conditions might be the 'cause' or the main contributing factor or element in producing event 'X' after positive relationships have been established between several of the antecedent conditions and the subsequent event. In this case, the research has shown quite clearly that the assumed 'cause' i.e. ethnic origin (of which a particular child-rearing system may be a sub-set) bears virtually no relationship to the later event, viz a particular style of friendship behaviour. Thus the usual defect of ex post facto research is of much less consequence here. The failure to show a significant positive relationship between ethnicity and friendship behaviour removes the necessity of having to decide whether ethnicity (as one of several possibilities) should be regarded as either 'the cause' or as one of

several 'causes'. The evidence here is that of statistical probability i.e. the nearly complete absence of signs of a significant trend in friendship behaviour related to ethnic origin reduces the probability of ethnicity being shown later to be influential to friendship behaviour. A further result of this particular finding must be a decline in the likelihood that the hypothesized form of child-rearing influences friendship behaviour.

Another aspect which should be examined is the operationalization of the playground behaviour into written lists of friends' names. Here, the problem is one of validity. Should a numerical score based on lists of names be acceptable as an expression of preferences with regard to friendship behaviour? The assumption is being made that those children who like playing with many others will also write down many more names. That this might not necessarily be the case is possible for various reasons. Factors affecting the child's willingness to write names include: apathy, distaste for the act of writing, inability to spell names, desire to 'show off' by writing many names, desire to think that one is well thought of by others, desire to be sociable or aloof. Any of these could affect a writing task because of its self-conscious nature, but not affect the unself-conscious act of playing outside in the playground or away from school.

The presentation of the survey to the children by the researcher is another aspect which should receive close scrutiny. The attempt was made to distinguish between 'close' and 'other' friends, and by using only the list of 'close' friends, to standardize to some extent the children's definition of 'friend'. It is possible that this was not successful, some children might not have been guided by this suggestion, or different children might have been guided in different



ways. Another defect which could have occurred in the classrooms was that some of the children might have regarded the task in a competitive light and set out to write more names than their neighbours. As competition is often held to be a middle-class Pakeha phenomenon (especially in the classroom), it could well be that the scores of many Pakeha children might have been made larger by pressure of this sort. Other children may simply have added names from those written on the blackboard by the researcher to help children with their spelling. Some or all of these factors could have been operating to some extent in some or all of the classrooms and hence be invalidating the results. For these reasons it is possible that the written lists might not be a fair reflection of playground behaviour. On the other hand, it is possible that these variations in response might not have occurred systematically by any of the defined categories and hence they could be cancelling each other out. However, it must be stated that none of these possibilities has been investigated.

Still another aspect which should be examined is the premise that earlier experiences within the family would be the most fruitful area to explore for traces of Maori influence. This still seems a reasonable assumption to make but it has produced two weaknesses in the design. Firstly, the decision to confine the type of alternative variable to sources of influence within the family meant that the 'independent' variables would be very likely to be related. Secondly, by looking only at the family, current sources of influence external to the family were ignored, thus necessitating greater reliance on ex post facto methods. The research results have emphasized what was known already from the literature (eg. Adams 1973,



Harker 1973, 1976. Bray 1974). viz. that ethnic differences tend to run parallel to some other social differences. If at least one of the independent variables had attempted to measure some current activity or behaviour or attribute of the children, then a fresh perspective (ie. one not closely related to the other variables) might have been revealed.

As to what this might have been, it is difficult to say. In principle, the search is for a variable which will discriminate among children on grounds likely to be unrelated to ethnicity, or at best, only slightly related. While ethnicity itself has been shown to have only slight influence on friendship behaviour, those variables to which it is significantly related, eg. family size, presence of relatives and SES can also be expected to have a stronger effect on other variables in the social context. A few activities or attributes applicable to eleven-year olds which might be appropriate here have been the subject of other studies, eg. school achievement and ethnicity, Ausubel, 1961, Lovegrove, 1966 and Harker 1973, 1976. Another is school achievement and social class, (in New Zealand) Dawson and Hallinan 1969, Vellekoop 1969, (in England) Musgrave, 1965, Hargreaves, 1967, Lawton, 1968 and Henderson 1970. Another activity of this age group which could be investigated is membership of voluntary youth groups, although here again, a relationship with social class might be suspected.

The principle might be clear, but suitable variables might be hard to find in practice. In their absence, even greater reliance must be placed on the ability of regression analysis to unravel the effects of related variables on any given criterion.

The defects or possible causes of error mentioned here seem difficult to avoid, even in retrospect, considering the restrictions imposed by the original line of the enquiry. Accepting its exploratory nature, the choice of both an ex post facto design and large scale statistical analysis seem inevitable. That the usual defect of the ex post facto design has been mitigated to some extent was fortuitous, but a single case based on statistical probability provides something less than definitive proof. Perhaps the most serious other weakness remaining concerns the validity of attempting to interpret playground behaviour through a written survey. By placing reliance on quantitative rather than qualitative methods, the chance of recording any subtle nuances of attitude or motivation between the ethnic groups must inevitably suffer. In principle, at least, preferences for size and persistence of friendship groups could be similar but for different reasons.

### CONCLUSIONS

#### The effect of Ethnicity on Friendship Behaviour

This research project set out to investigate the possibility that (in one town at least) Maori and Pakeha children might display different styles of friendship behaviour in such matters as the preferred size of friendship group and degree of persistence displayed in retaining friendships. It was felt that a difference found here might be indicative of other differences in behaviour and outlook between Maori and Pakeha children which, although often regarded as common knowledge, are proving difficult to substantiate through research.

Friendship behaviour was chosen as a field of study partly because it seemed to provide an aspect of children's behaviour less directly concerned with some of the more academic considerations around which many Maori-Pakeha comparisons have centred in educational studies. It was hoped that evidence might be produced which would help to clarify one small aspect of the more general question concerning the extent to which Maori cultural influences are actually affecting the behaviour of Maori children today. As mentioned earlier, there is a difference of opinion between Maori writers such as Walker (1973, 1974 and frequent popular articles in the New Zealand Listener) on the one hand, and several Pakeha writers on the other, eg. Adams (1973), Bray (1974) and Gregory (1974). The latter group tend to emphasize the effects of social influences other than Maori cultural ones, although it should be recorded that Bray, for one, (1973 p. 103) notes the force of 'ethnic cultural values'.

Does the difference between them arise from lack of cultural sensitivity on the part of some Pakeha writers, an excess of emotive nationalism or ethnic loyalty by some Maori writers, or to defects in research techniques, or some combination or all three? Perhaps the differences are too subtle to be measured? But if they are so difficult to elucidate, how can they be responsible for what often appear to be major behavioural differences in the social context, eg. levels of school achievement? Nightingale (1973) provides a summary of some of the opposing arguments.

Given positive evidence, it could be argued that such a difference, if it were found to be of significant proportions, should be taken into consideration by the schools in order to foster greater understanding of the social needs of their

Maori pupils. It could be proposed that different patterns of friendship behaviour would reflect, or be a surface manifestation of, underlying currents of cultural differences derived from the different ethnic backgrounds which should be recognized and respected. If the schools were to accept and cater for these as examples of cultural diversity, they might go some way to meeting those charges of monocultural bias and assimilationist pressures levelled against the school system, eg. Walker (1974). Practical acknowledgement by the schools of the effects on Maori children of an unselfconsciously observed cultural pattern might reduce some misunderstandings and increase the tolerance of teachers for the assumed behavioural differences. The supposed tendency of Maori children (often criticized by teachers) to get around in large gangs might not be due to rebelliousness or to anti-social inclinations, but might rather be a fairly basic response to a particular form of socialization.

In the absence of evidence of ethnic differences in friendship behaviour, it could be argued that ethnic differences in other respects might be of less relevance than is sometimes claimed for them, eg. Walsh (1971) Ritchie (1963, 1974), Walker (1973), Smith (1974) and Johnston (1974).

Bearing in mind the reservations expressed above due to the nature of the research design and methodology, the only reasonable conclusion possible from this study is that ethnicity appears to have very little influence on the friendship behaviour of the children surveyed.

The apparent relationship which the original playground impression suggested, must be explained, it seems, in terms of the greater 'visibility' of the Maori children making them and their behaviour more noticeable. Hence, the impression was at least partly misleading.

The apparent relationship indicated so strongly in the first phase analysis is explained by the multiple regression analysis as being caused by the concentration of Maori children in certain other social categories, viz. large family size, relatives present, and (at a less effective level perhaps) low SES.

#### THE EFFECTS OF THE OTHER VARIABLES.

Some comments should now be made about the influences other than ethnicity. This research suggests that it is the Number of children available in the extended family group with whom the child customarily associates in the non-school environment, rather than an ethnically-related child socialization system, which has more influence on his friendship behaviour. Children in large families (whether Maori or Pakeha) who also have cousins or other similar-age relatives living in the district, are (due to the combined effect of these variables) much more likely to express preferences for friendship networks which are both larger and more changeable. The common characteristic here would seem to be the child's experience of mixing with larger numbers of other children, regardless of ethnic origin.

It so happens that a very high proportion of the Maori families have relatives living in the

district because of their long continuous settlement of the region. Unfortunately, 'immigrant' Maori families are too few to give any real indication of the possible influence on their children of having only a small number of other relatives present, as distinct from choosing friends from among non-relatives.

The stronger relationship which has been shown to exist between friendship behaviour and the number of friends potentially available in the child's environment, suggests that the slight relationship between ethnicity and friendship behaviour which exists at present will most likely diminish in time. Factors likely to promote this process are, the reduction in the size of Maori families, the continually increasing geographical and social mobility of Maori people breaking up the close proximity of kin groups, as well as the steady attrition of other assimilationist pressures. Such a trend would fit in with an interpretation of the sort of family behaviour described by Ritchie as being largely a relatively modern, transitional development, unconsciously devised by Maori families as a practical way of coping with an increased family size due to improved hygiene standards and lower child mortality rates, but becoming less necessary as living conditions continue to change. It is also possible that, now, 20 years after Ritchie described such behaviour at Rakau, whatever currency it might have and had then, it has already receded under the pressures of urban living, integration into Pakeha communities and the influence of T.V., schools, and so on.

Still another possibility is that the apparent similarity in friendship behaviour between Maori and Pakeha children might represent a convergence from both sides, of practices and attitudes due to their



constant association. Testing such an idea would require a replication of the survey in say, a South Island town where the Pakeha children would be much less exposed to the influence of Maori children. It is easy to make the assumption that if the behaviour of Maori and Pakeha children is similar then it has been the Maori children who have changed.

### Ethnicity and Child-rearing Methods

If it is true that ethnicity has only a very minor effect on children's friendship behaviour, the question arises, how much credibility should be attached to the ethnically related differences in child-rearing methods proposed in Chapter Two? It has been stated previously that the demonstration of an ethnically related difference in children's friendship behaviour could not be accepted as 'proof' of the causative role of the assumed ethnically related differences in child-rearing methods. The question now is, does the absence of evidence indicating an ethnically related difference in friendship behaviour 'prove' that Maori and Pakeha child-rearing practices must be similar?

That this need not necessarily be the case seems plain enough as several alternative explanations seem plausible. It is possible there could be present other intervening variables capable of producing a variety of alternative effects. Once again the weaknesses of ex post facto design are revealed. Just as positive evidence of a relationship does not 'fix' or 'prove' causality, so negative evidence or the absence of definitive evidence either way cannot be regarded as sufficient to prove that there is no relationship, although it must seriously



weaken a case for such a relationship. However, the failure to demonstrate a difference in friendship behaviour here, suggests that the proposed differences in child-rearing practices, however plausible such a case might sound, cannot be affecting childhood behaviour very much, if in fact, any differences effectively exist at all.

Nevertheless, it is possible that Maori child-rearing practices could still differ in some important respects from the usual Pakeha practices, even allowing for those variations derived from or related to differences in social class origin or in European ethnic backgrounds. It could still be argued perhaps, that a distinctively Maori form of child socialization is functioning today (albeit probably in somewhat diluted form), and yet have virtually no measurable effect on the friendship behaviour of Intermediate school-age children because it has been overlaid by 5-6 years of school experiences which are common to both groups, or because of the countervailing influence of other social pressures, or to the ineffectiveness of the measuring device being used here, or a combination of all three.

Perhaps another less likely possibility should be mentioned in passing. The style of child socialization described by Ritchie might never have been the practice in this particular region; no research indicating that this was definitely the case has been sighted by the present writer. If local Maori child-rearing methods did not follow the pattern described by Ritchie, but were already closer to the Pakeha style, then significant differences between Maori and Pakeha would be less likely. However, such a line of reasoning would run counter to the argument of cultural consistency or continuity proposed by Ritchie, connecting what he

described at Rakau to behaviour observed by others in Hawaii and Tahiti, and hence, by implication, to origins in ancient Polynesia. In any case, it seems unlikely that Maori practices in the region concerned would be closer to Pakeha than to other Maori customs.

In summary, it seems best to state as a conclusion to this section that this research has not added any significant evidence either supporting or <sup>refuting</sup> the existence of a distinctively Maori (Polynesian) mode of child-rearing in this region.

Returning to the narrower topic of friendship behaviour, the indefinite conclusion reached permits of two broad interpretations. Firstly, it might be concluded that the friendship behaviour of Maori and Pakeha children is to all intents and purposes roughly similar, i.e. the evidence correctly represents the real social situation. Secondly, it is possible that significant ethnic differences still exist but because of methodological defects the present research has not discovered such differences.

#### Implications for further research

Because of the reservations already noted above, it would be naive to place too much weight on the first interpretation. On the other hand, the failure of ethnicity to retain significant support after the multiple regression analysis does little to support any suggestion that further investigation of the friendship behaviour issue is warranted. At this point it is desirable to separate again the questions of the children's friendship behaviour and the possibility of discovering ethnically different child socialization systems.

As far as further research into either area is concerned, the avoidance of ex post facto methods if at all possible is to be recommended, difficult though this might be.

### Friendship Behaviour.

Possible contemporaneous influences on Intermediate school-age children's friendship behaviour which could be investigated in a similar type of survey, include their membership in youth organizations such as Scouts, Guides, Sports Clubs and Church groups, current level of school achievement, antisocial tendencies (measured by eg. school records, Children's Court appearances, contact with Child Welfare, etc.). As in the present research, indicators such as these may be obtained fairly readily, (a necessary requirement for large scale survey research), a certain objectivity is possible and replication of the research is practicable.

However, the choice of these variables does nothing to reduce doubts over construct validity (the relationship between actual friendship behaviour and a written list of friends), or those related to the conduct of the survey in the classrooms. In these respects methodological weaknesses are still likely to mar the results obtained and thus throw further into question the whole approach of using lists of friends to study friendship behaviour.

Child socialization.

Finally, turning from friendship behaviour to the topic of child socialization, the point made previously should be repeated: the two subjects are logically distinct, with the latter having a much wider frame of reference. The general question of whether, and if so to what extent, cultural or ethnically related behavioural differences still exist between Maroi and Pakeha children continues to be of interest to many people in the field of education. In this regard, more research into the actual family socialization practices employed in Maori and Pakeha families might provide some hard evidence in place of the assumptions often made, as in for instance, the Education Department's booklet (1971) "Maori Children and the Teacher", with its unquestioning extrapolation for example, of Bernstein's (1961, 1967) "restricted" and "elaborated" codes.

## APPENDIX

### FORMAT OF QUESTIONNAIRES,

This is the standardized procedure carried out in each classroom while conducting the first Friendship Survey.

"Hello girls and boys. I am from Massey University in Palmerston North. I am carrying out a survey on Children's Friendships. I am going to ask you some questions and I would like you to write down the answers. The questions are about yourselves and I will treat your answers confidentially, that means I will not tell anyone, especially teachers at this school, anything about what you have written. All the information will go into the Computer at the university. Any questions so far?"

Copies of the Survey are handed out. Instructions for answering each question are given orally. Help is given to ensure the best understanding possible of the preliminary questions.

"Now girls and boys, I want you to make up two lists of your friends. The second list is over on the second page. On the first page you write down only the names of your very best friends, your closest mates, the ones you like to knock around with, the ones you play with the most, after school, weekends, holidays, whenever you can. Girls or boys, it does not matter which, but no adults please, only children about your own age. It does not matter if they are relations. The second list will have the names of your other friends. All clear? Now write down the names of your very best friends. First name, surname, and then the name of the school they go to."

Questions are answered. Help is given with the spelling of names, especially surnames and names of schools. Similar instructions are given for the second list:- second best friends - and the third list - similar age relatives known to be living in the vicinity. Their attention is drawn to the fact that although 12 lines have been drawn, the children can write down as many or as few names as they like.

When all the children seem to have had enough time for their lists, the following remarks are made to conclude the session.

"Thank you for your help, girls and boys. You have taken the job very seriously. Remember, your answers will be treated confidentially. When I have finished work on this survey, all your sheets of paper will be destroyed. I am grateful to you and your teacher for letting me take up your time."

FRIENDSHIP SURVEY

1. Name \_\_\_\_\_
2. Address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. Father's Job \_\_\_\_\_
4. Mother's Job \_\_\_\_\_
5. How many children in your family? \_\_\_\_\_
6. How many older brothers and sisters in your family? \_\_\_\_\_
7. If they go to this school what are their names?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
8. What school did you go to last year? \_\_\_\_\_

Please write down the names of your very best friends.  
 If they go to this school tick their name. If they  
 go to another school, write in the name of that  
 school. You may carry on over the page.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_



Please write down the names of your other friends. If they go to this school tick their name. If they go to another school write in the name of that school.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

Please write down the names of any of your relatives who are in Standard Four, Form I or Form II. If they go to this school tick their name. If they go to another school write in the name of that school.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

## SECOND FRIENDSHIP SURVEY

This is the procedure to be followed on the return visit to each classroom, six months after the first survey.

"Hello girls and boys. Some of you may remember that I visited you earlier in the year and asked you to fill in a form for a Friendship Survey. Now, I have another survey and I need your help again. This one will not take so long but it is just as important."

The forms are distributed and oral assistance is given in answering the preliminary questions.

"Write down the name of your father's (or mother's) job. If you do not know, write the name of the place where he (she) works. Now write down what race or nationality your father (mother) is. You know what that means. He (she) might be Dutch or English or Maori or Australian. Put down what you think he (she) is."

A matter of fact tone of voice is maintained so that no weight or emotional overtone becomes attached to any aspect of the survey in the children's minds. The terms "Maori" and "Pakeha" are interspersed among the others. Children are told they may put "New Zealander" or "Pakeha" or "Kiwi" or "European", whichever they think is the right one for them.

The completed forms are collected and the children again thanked for their assistance.

SECOND FRIENDSHIP SURVEY

1. Name \_\_\_\_\_ 2. Address \_\_\_\_\_
3. Father's Job \_\_\_\_\_  
\_\_\_\_\_
4. Mother's Job \_\_\_\_\_
5. Parents' Race or Nationality - e.g. Pakeha, Maori,  
Dutch etc. Mother \_\_\_\_\_ Father \_\_\_\_\_
6. Please write down the full names of your very best  
friends. Tick the name if the friend is at this  
school.
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

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