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PERCEPTIONS OF RESIDENTIAL CHILD  
CARE IN NEW ZEALAND

A thesis presented in partial fulfilment  
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## ABSTRACT

This thesis sets out to describe and explain aspects of residential child care in New Zealand. It notes that the indigenous literature is sparse, that the subject has been neglected as a research area and that there is uncertainty about residential child care as a form of substitute provision.

To clarify the subject area, a review of the international literature focuses first on the way in which children are assigned to residential care. It then examines formative trends and influences, principles and methods and knowledge about the participants and suggests that the field lacks clear definition and identity.

Prior to formulating a research strategy, previous studies are evaluated and five of these, dubbed the Milestone Studies, are examined in detail. Some proposals from General Systems Theory, in particular the study of complex adaptive systems, are reviewed and these elements built into a research model which draws together the constructs of perceptual process, role-interaction and system-matrix. This model develops six cumulative theoretical propositions based on those notions, defines its operational terms and formulates fourteen hypotheses for empirical testing.

For the field work, a survey instrument, including a semantic differential device, was constructed and pilot tested. The population, consisting of staff members in certain roles plus all young persons aged thirteen years and over was reached through a two-stage postal survey. The first stage ascertained numbers and the second brought in 961 individual responses, estimated to be 80% of the total population as defined.

The results confirm that although the two separate systems of residential child care, one run by the State and the other by diverse non-statutory agencies, have some characteristics in common, they are distinguished by the ethnic origins of their constituents, the length of time that members have been associated with child care and by different perceptions of roles and objects. Moreover, distinct intra-system differences between role-groups were observed. Differences are explained largely in terms of the emphasis of the State system upon the re-socialization of the adolescent offender compared with the non-State commitment to the younger, dependent child.

This study concludes that it achieved the goals set, that it makes a small contribution to the research application of the semantic differential and that it provides a base for further study in the field of residential child care.

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## Introduction

This study, the fieldwork for which was conducted under the title Project RCC [ RCC for residential child care], examined some characteristics of groups of people associated with both the State and non-State systems of residential child care. Responses made by those individuals were used to form a global picture of those systems as perceived by their constituents.

In providing an account of the way in which this portrayal of perceptions of residential child care as a system of substitute care was produced, the thesis employs the following strategy. Chapter I outlines the research problem and states the aims, tasks and some major assumptions together with the setting of the study and its limits. In Chapter II, the diverse traditions and influences that have shaped modern practices in caring for children in groups are reviewed. Chapter III deals with the evaluation of theory and considers some theoretical formulations of the nature of residential organizations and the elements of General Systems Theory. That leads, in Chapter IV, to the development of the working research model based on a synthesis of the approaches examined and to the list of hypotheses proposed for testing. Chapter V covers the experimental procedures and methods. Results are tabulated and discussed in Chapter VI, and the final chapter presents some conclusions and a summary of the work.

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CHAPTER 1  
THE RESEARCH PROBLEM AND  
STRUCTURE OF THE STUDY

In essence, the problem was to describe and explain aspects of residential child care in New Zealand. The choice of this problem seems warranted for two reasons: In the first place, there has been a dearth of references at all levels. Indeed, the most recent published investigation on children's homes in New Zealand appeared thirty-four years ago [Mathew, 1942]. Since then only a few scattered papers, based on non-empirical approaches and dealing with limited aspects of institution life, have appeared in the New Zealand literature [Atwool, 1967 ; Ball, 1966 ; Ford, 1966 ; Panckhurst, 1972 ; Mirams, 1949]. Only one thesis treating residential child care is available and that deals solely with the first fifty years of European settlement [Whelan, 1946]. Two pseudo-autobiographical books by former wards of the State, one dealing with the period prior to World War I [Lee, 1936], and one dealing with the 1930's [Bonheur, 1970] give emotive accounts of the child welfare system and children's institutions.

Those items listed above, which exclude periodic reports by agencies sponsoring residential child care, comprise the known total of significant sources in that field. By any standard, residential child care in New Zealand could be regarded as a neglected area in historical and empirical research.

In the second place, there are indications of a general disenchantment with residential care as a form of substitute care for children. The tenor of earlier articles is reinforced by two official documents. The first, Juvenile Crime in New Zealand, concludes that institutional training for young male delinquents is overly expensive and ineffective in changing future behaviour [Department of Social Welfare, 1973]. The second, a National Development Council Report on social services generally, contains the following words:

"The Working Party was aware of the pervasive sense of disquiet in the whole field of residential services . . . Institutions must not be seen by the public, by administrators, by those in residence, or by the staff who work in them as dumping grounds for cast-off social misfits." (Social Council, N.D.C., 1973, para. 54).

Those two statements carry an implicit invitation to map the perceptions of participants in residential child care.

The study commenced with the aim of ; reviewing the New Zealand State and non-State systems of residential child care through the perceptions of groups of persons most closely associated with those systems ; ascertaining parameters of those systems and describing some characteristics of their constituents ; achieving a global overview of the systems through the testing of some hypotheses embedded within a plausible research model.

Briefly stated, the task then became the building of a problem-solving strategy to achieve the aim. That task is refined into five distinct steps:

- [1] A review of all reference material which has a bearing on the topic.
- [2] The construction of a theoretical framework applicable to the problem.
- [3] The testing of that framework by empirical referents.
- [4] The production of verifiable facts and generalizations.
- [5] The drawing of inferences about the possibilities of controlling and predicting changes within the problem area.

Underlying the approach to the problem were certain assumptions. Firstly, because considerable confusion surrounds the nature of the residential child care enterprise (as the review of literature in Chapter II indicates), high priority should be given to the exact specification of terms in the problem being investigated. Secondly, because of the dearth of information

on New Zealand practices in residential child care, the collection of basic demographic descriptors for the total population involved would be more desirable than using facts gathered only on a sample population. Thirdly, in the absence of indigenous material that permitted the New Zealand problem to be equated with work in other countries, a theoretical framework might need to be developed specifically for the New Zealand situation.

Because of the nature and concern of the study, its major focus is in residential child care settings. Residential child care in New Zealand falls into the category of child welfare services, a field of social work. For the study, attention is directed on the twenty-one children's institutions run by the Department of Social Welfare and on a further forty-six places administered by various non-State, principally church-based, agencies and on the perceptions of people, adults and young persons, servicing those places or living and working within them. <sup>1</sup>

Of necessity, the research procedures adopted have inbuilt limits. By concentrating upon the perceptions of the person-in-situation, alternative strategies to illuminate the residential child care issue are forgone. In particular, no account is taken of structural elements in the organizations represented and only a limited attempt is made to ascertain functions. Although the ultimate limitation of this study rests in its nature as a student exercise, nonetheless it has the potential to make a contribution by describing the problem area, by testing one theoretical approach to the systems studied and by providing a foundation and directions for future research in a field hitherto unexplored in New Zealand.

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1. Those numbers are the total of places meeting the definition of a residential child care centre adopted for this study.

CHAPTER II  
TOWARDS AN IDENTITY FOR RESIDENTIAL  
CHILD CARE

Introduction

This chapter sets out to clarify the subject area dealt with in this thesis and to distinguish residential child care from alternate forms of substitute care<sup>1</sup>. It also examines how children are assigned to particular caring modes and reviews the literature to provide a broad and general overview of the residential child care enterprise but with particular reference to : the trends and influences of this century ; views of the tasks, the principles and the methods used ; knowledge about the people, children and staff, in residential child care. The chapter concludes with a summary of those central topics.

Systems of Substitute Care

All children, at any stage between birth and legal independence, are potential candidates for substitute care. Some will be admitted concurrently, or serially, to more than one form of care [Marshall and Steward, 1969]. The following discussion on the main steps in such admission, and the different systems which receive children, is based on the schema shown in Figure 1. In this figure, the position of the child is at the centre encircled by the reasons why substitute care might be considered. The decision to seek substitute care forms the boundary of that inner circle which, in practice, must rotate to match decision with action. The segments of the outer circle are divided first into two broad systems of care, family-type and staff-inmate type, then into their sub-systems. The elements of the schema are now considered separately.

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1. For present purposes, the term children will be used to include young persons. The Children and Young Persons Act, 1974, following the English precedent, created the legal entity of young person, meaning those aged 14 years and less than 17 years. A child is a person less than 14 years of age.

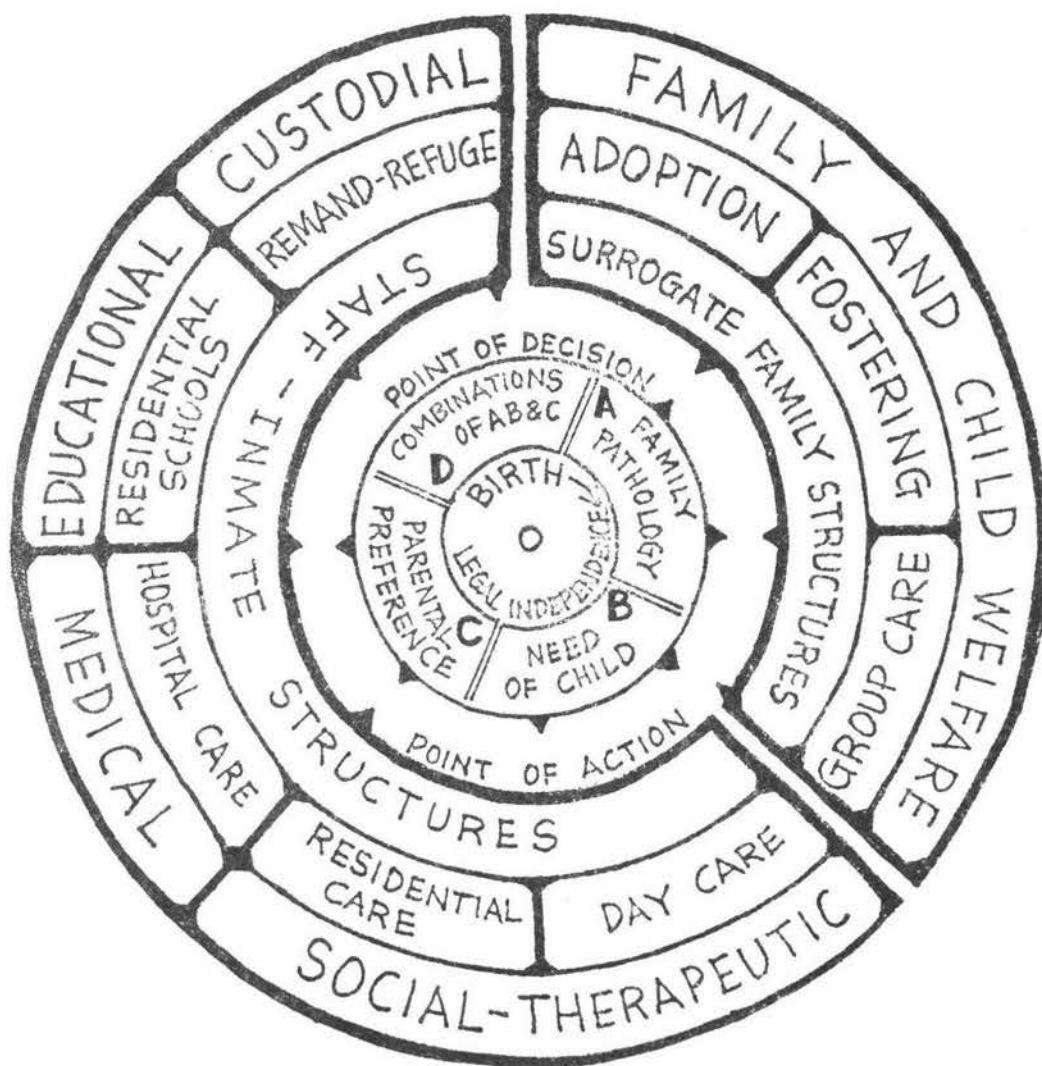


FIGURE 1

A Schema for Systems of  
Substitute Child Care

Biologically, the human neonate is totally dependent upon its caretaker for survival. This dependence sets a pattern of socialization in which it has come to be accepted that the social role of child must be complemented by the role of caretaker of child (Adamson, 1973). Likewise, the role of mother is defined by the complementary role of child. When this complementarity is broken or deemed inadequate, there are a number of alternative pathways available. The woman who wishes to become, or continue to be a mother may seek to adopt or foster a child (Wakeford, 1963), and, in the interests of the child, its family or social agencies will move to provide substitute care.

Four groups of factors account for the circumstances precipitating a child into the whole-time, or substantial part-time care of agencies other than its family of origin.

Firstly, there are those factors stemming from transient or irreparable pathology in family structure where the child is rejected or not given suitable care. That group is represented by segment A in Figure 1. Secondly, there is that group of factors arising from specific needs of the child shown as segment B in the figure. Thirdly, segment C covers those factors where neither of the first two apply and where substitute care is chosen, for any reason, by the parents or guardians. The final group, segment D, represents the four possible combinations of the first three groups of factors.

This analysis raises several issues about the point at which the caretaker or social agency decides that substitute care is necessary. The first issue concerns the system or type of care chosen for the child, for it is at this point that the possibilities are first sharply divided. Children may be admitted either into structures based upon the family model or into systems where the caretakers are known as staff. Both are dealt with in turn.

Surrogate Family Structures. The relocation of children in a family setting other than their own is done in the three

distinct ways of adoption, fostering and group child care.

(i) Adoption, in this brief review, refers to adoption by strangers although the legal adoption of children subsequent to the marriage of their natural or step-parents is commonly done to legitimise the children's status and to regularise names and lineage [Department of Social Welfare, 1975]. The prime distinguishing feature of adoption is that the guardianship of the child is transferred to the adoptive parents to the exclusion of all others. Thus, the child and adoptive parents are bound by all the rights and obligations existing for children of natural issue<sup>2</sup>. In adoption, unlike other forms of substitute care, there appears to be a sense in which the needs of the adoptive parents are considered equally with the needs of the child [Humphrey, 1969]. Common-law adoptions signifying a relationship which has not been approved initially by judicial fiat [Goldstein, Solnit and Freud, 1973] are not recognised in New Zealand. The complex issues and problems in adoption have received considerable research attention [Pringle, 1967 ; Rowe and Lambert, 1973 ; Triseliotis, 1973].

(ii) Fostering is usually considered an ancillary function carried out by a family resident in its own home. Guardianship of the child does not rest with the foster parents who may find their role ". . . ill defined and sometimes conflicting with . . . their basic role as parents", [George, 1970, p.42]. Foster parents are not usually employees of the agency making the placement but enter into a specific contract for each child for whom a boarding allowance is paid. Long-term fostering of a child may have all the characteristics of adoption except for the legal sanction.

(iii) Group child care has come to represent a stage between fostering and residential care, in which full-time foster parents care for children in a home owned by the agency. Some are salaried employees while others receive only a boarding allowance for each child. In many instances the

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2. In some countries, and under certain religious dogma, adoption may not entirely remove discrimination against or stigmatization of those born out of wedlock.

Foster father is expected to follow his normal occupation. As the group is usually small, the situation is akin to a family one, hence the terms family foster home, cottage homes, and villa groups. Attempts are made to minimise the institutional features of the large residential centre. Moreover, most group homes, except those arranged like a village, do not have the supporting infrastructure of the self-contained residential centre ; they are more likely to be serviced, where indicated, by external supports (Kadushin, 1974).

Staff-Inmate Structures. The remaining segments of Figure I need to be explained. The alternatives to the placement of children in surrogate family structures are placement in : day care ; residential nurseries ; hospitals ; hostels ; children's homes ; boarding schools ; training schools ; penal or correctional establishments and other institutions operated by personnel identifiable as staff. The persons with whom the staff work have the complementary role of inmate, a generic term covering the situation-specific roles of infant, patient, boarder, pupil, trainee and so on.

Day care, the first segment in the staff-inmate sector of the schema in Figure I, is seen by many writers as a supplementary family support service (Kadushin, 1974 ; Maier, 1965 ; Packman, 1968). The place accorded day care in the proposed schema rests upon its nature as substitute provision, its social-therapeutic inclination and its staff-inmate structure. In the U.S.A. and Great Britain there is evidence that practitioners of day care have identified more with the social work sector than with the established educational or medical enterprises <sup>3</sup>.

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3. This is reflected, for example, in the increasing content of day care themes in the periodicals Residential Social Work, official publication of the Residential Care Association of Great Britain, and Child Welfare, journal of the Child Welfare League of America.

This may be partly explained by function as day care services often have a greater involvement in both custody and therapy than does the traditional school system [Meyer and Kahn, 1965]. Day care falls, however, outside of that group of facilities with staff-inmate type structures which have come to be known as total institutions [Goffman, 1961], and which are shown in Figure I as certain schools, hospitals, remand centres and residential child care centres. As they share this totality attribute, the relationship between these four areas will be examined next within an account of the mechanisms which determine the form of care to which a given child may be assigned.

#### Assignment in Residential Child Care

This section considers in some detail the conventional divisions of residential child care as staff-inmate structures and critically examines the way in which children are placed.

Traditionally, residential centres for the whole-time care of children are broadly grouped according to the discipline whose theory or perspective predominates, and then further subdivided by the common practice of grouping like with like. There appears to be widespread agreement in labelling the four major systems as custodial, medical, educational and social-therapeutic [Moss, 1975]. Operating within those systems are institutions designed to meet one or more specific needs of children as expressed by their behaviour and symptoms. This array is shown in Figure 2, which outlines an assignment model for residential child care consistent with current practices.

Reliance on the model given in Figure 2 implies that sick children are admitted to hospital, normal, healthy children are enrolled at boarding schools and acting-out delinquents are confined to training centres. It might be concluded that because each specialised area exists to serve the special needs of children, the task of assignment is simply the procedure of matching the behaviour and symptoms of the child with the service offered by the appropriate regime.

Regime	Service offered based on need and behaviour of child
1. Custodial	[a] refuge [indigency or neglect] [b] remand custody
2. Medical	[a] psychiatric [b] psychopaedic [c] physical , organic [d] multiple handicap
3. Educational	[a] "normal" [b] remedial [c] backward
4. Social-therapeutic	[a] dependent [b] pre-delinquent/ delinquent [c] emotionally disturbed

FIGURE 2

The conventional assignment model  
for residential child care

It is contended here that it is difficult to predict with any accuracy that the diagnosed need of the child will be the sole determinant of its admission to the equivalent treatment regime. The task of categorising children is a complex issue that is often constrained by factors extraneous to the needs of the child. In practice, the way in which children in need are assigned to particular regimes remains one of the least understood mechanisms of social provision. Moreover, use of the conventional model rests on the assumption that a given treatment regime is available and that its activities will be in accord with its apparent goals. To begin with, classification by regime may, in fact, confound our understanding because residential centres can be categorised in a variety of other ways such as by auspices. For example, religious instruction may take precedence over educational attainment in the thoughts of the parent choosing substitute care for a slow-learning child and so limit the chances of making the best possible match between need and treatment.

In New Zealand, the movement of children within and across agencies shows that criteria may change and that behaviour and need of the child can be arbitrarily re-defined <sup>4</sup>. Referring again to Figure 2, it is not uncommon for two-way exchanges between categories 2(a) and 4(c) in which the role of psychiatric patient is exchanged for that of institution trainee [Department of Social Welfare, 1975]. A similar traffic has been implied between services dealing with emotionally disturbed children and psychiatric services [Mitchell, 1972]. The process of decision making at the point of admission to residential care has attracted some study, but at this stage it has done little more than to identify the variables involved [Billis, 1973]. Although some tentative answers to the assignment question have been offered by studies purporting to match children's needs with treatment outcomes [Matsushima, 1965], the process which

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4. In a departmental survey of psychiatric facilities open to wards of the Director-General of Social Welfare it was reported that one adolescent unit had lowered its intake age from under 16 years of age to under 15 years of age. Wards of age 15 and over seeking psychiatric in-patient treatment were then admitted to adult units.

determines that a given child is assigned to one chosen regime still remains obscure.

It is suggested that residential agencies frequently receive their clients on the basis of social control rather than on individual need (Hazel, 1968), and slight supporting evidence might be inferred from a comprehensive survey of child caring institutions in the U.S.A. (Pappenfort and Kilpatrick, 1970). Sixty-one per cent of all agency directors polled in that study reported that they had retained children in care whom they considered should have been placed in foster care. Sixty-four per cent thought that they retained children who would have been better placed in alternative forms of residential care. The accumulation of indicators of this kind on the assignment question enables informed evaluation such as:

"The decision to seek residential placement of a child is, in most cases, still more a decision of desperation than of deliberation. It is undertaken in response to the insistence of either the family or society that the child be removed from the community. The welfare of the child is seldom the decisive impetus behind the decision, although the justification is invariably stated as if it were." (Kester, 1966, p.338)

Deciding how to allocate children is also made more difficult because very little is known about how to make suitable judgements (Matsushima, 1965). The available evidence seems to suggest that the system to which the child is assigned is determined by the perceptions of reality of the social agency which first accepts that child as a valid case. The problem then becomes defined in the terminology of that tradition.

A final question on the utility of Figure 2 as a guide to placement concerns the activities actually observed within each centre. The name of a residential centre is not necessarily a good indication of its orientation. Moreover, each regime appears to borrow from the other, to one degree or another (Hey, 1973). A hospital may give strong emphasis to education and a school may give high priority to medical treatments. This generalization holds good in New Zealand.

At times in the past, some psychopaedic hospitals have been without a registered medical practitioner on their staff, and during the activity hours of ambulant patients in those hospitals, non-medical training officers replace nurses<sup>5</sup>. Similarly, teaching staff comprise as little as ten per cent of total staff members in residential special schools run by the Department of Education.

To sum-up, although the term residential child care is customarily meant to exclude hospitals, schools and custodial institutions, it is apparent that in all those places similar work is done with children of similar needs and characteristics. The process by which children are assigned to one form of residential provision or another is still unclear. At this point, having accepted that there is considerable overlap and uncertainty permeating the overall services in child care, the theme turns to social-therapeutic centres in particular.

#### Trends and Influences

This section draws out of the child care literature some of the major trends and seminal influences affecting current residential child care practice. Only English language sources are referred to, drawn almost equally from the U.S.A. and Great Britain but with minor reference to New Zealand and other countries. Some other limits are also observed. The material used is mainly from the area previously identified as social-therapeutic, excluding many child care reports with a medical, educational or custodial orientation although, inevitably, some mention of those latter areas is necessary. Further, except for that literature dealing with the structure and dynamics of groups and organizations, only reports on centres dealing with children and young persons are included. That decision in no way challenges the recent trend to consider homes for all age ranges as being legitimately encompassed within residential social work (Residential Care Association, 1973 b). Rather, residential child care is considered to be

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5. Personal communication, Principal Training Officer, Department of Health, 1976.

a special field within residential social work.

Centres for the substitute care of children have a long and somewhat inglorious history. More than any other form of social provision, the orphanage and the workhouse helped to reflect societal attitudes towards the weak, the indigent and the outcast. The pathos of controlled neglect and repression came to be a focus for vocal social reformers of the late nineteenth century, which was also a germinal period for child succour programmes utilizing the residential centre. [Balbernie, 1972 ; Beedell, 1970 ; Heywood, 1969 ; Kadushin, 1974]. Paradoxically, an almost universal disenchantment with residential care as the single preferred mode of treatment began to be expressed simultaneously with the founding of several monolithic agencies for example, Dr. Barnardo's and the National Children's Home in England. [Davey, 1968 ; Whittaker, 1971 ; Wymer, 1954].

By the twentieth century, new practices of differentiated care, especially the growing fashion for foster care, began a backlash attack on the concept of residential care from which it has never fully recovered. Certainly the residential child care field has never been sufficiently well-informed about itself to answer its critics except by citing oblique support from some child care authorities [Keith-Lucas, 1962 ; Clare Winnicott, 1964]. Nonetheless, an objective reconciliation spelling out the strengths and weaknesses of both the residential centre and fostering practices was attempted by Wolins and Piliavin [1964]. They concluded that each have something unique to offer.

The New Zealand example illustrates the simplistic polarity into which the debate over the efficacy of forms of substitute care had been forced. Following the report of the visit to the U.S.A. and Canada in 1925 of the then Superintendent of Child Welfare, John Beck, [Department of Education, 1927] many imaginative and forward looking changes were incorporated into the Child Welfare Act passed that year. That act, not superseded until 1974, by the Children and Young Persons Act,

specifically charged that

" . . . children shall not be maintained in institutions save in exceptional circumstances."

By legislating for foster home care, the Act legislated against the development of the residential unit. Such authoritative support, combined with reaction against dysfunctional institutions, helped to make the issue seem no longer in doubt. Institutions were seen as inadequate as a form of substitute care and fostering was considered to provide a better alternative. Only in the last decade has the pendulum begun to swing back to an acceptance of residential care for some children. Clinical practice and research have supported the formerly unpalatable contention that residential care might be productive for certain children, especially those without good mothering experiences (Winnicott, 1958), and for those removed from severely deprived environments (Tizard and Joseph, 1970 : Tizard and Rees, 1975).

The growth of residential child care as a system has been subject to multiple, often tangential, influences. For example, the surge of income redistribution policies, health and social security programmes in the twentieth century lightened the demand for residential beds. During that period, the impact of psychoanalytic theory, principally as expressed through North American social casework, was felt on two fronts. On the first, the almoner, equipped with what seemed to be an effective frame of reference, adopted an interest in the psychic mechanisms of her clients giving a new dimension to social provision (D'Amato, 1969 ; Reid and Hagan, 1952). Subsequent developments in the area of family therapy (Kemp, 1971) and, later, the notion of community psychiatry (Mora et al, 1969), all indirectly influenced residential care through changing strategies for the client population. On the second front, came the application within the residential centre of psycho-dynamic techniques dating from pioneering work with acting-out youths (Aichhorn, 1925).

A brief review of early workers now considered influential

in shaping developments in residential care may help to put the system in context. In the 1920's, reports began to appear of innovations in organizational structure, particularly such experiments in inmate government as Makarenko's [1941] Gorki Colony in Russia and Homer Lane's Little Commonwealth in England, a repetition of work done with the Boys' Republics in the U.S.A. [Wills, 1964]. Following in this tradition came; A.S. Neill, of Summerhill fame, [Neill, 1962], George Lyward and the centre he started in 1920 [Balbernie, 1972], of Otto Shaw at Redhill, [a school for disturbed boys of superior intelligence] [Shaw, 1965], and F.G. Lennhoff at Shotton Hall [Lennhoff, 1966a ; 1966b]. The synthesis of the work of these pioneers has been undertaken by Wills [1964 ; 1971] who also gives accounts of the application of their approaches through his own work with children [Wills, 1945 ; 1967 ; 1970].

All of these early workers subscribed to a psycho-analytic framework in their management of residential centres. A further common element was their use of the whole residential setting towards assistance for individuals.

Similar developments have been reported in the U.S.A. as that country moved out of the punitive era of residential care concomitant with the Poor Law ethic towards a treatment approach [Whittaker, 1971]. The emphasis on psychiatric intervention flourished at the expense of educational or social strategies. By the 1940's, the notion of the Therapeutic Milieu was being tested by Bettelheim at his Orthogenic School, Chicago [1950], and by Redl at Pioneer House, Detroit [1959]. The main thrust of this on-going work was to confirm a belief that purposeful techniques were being developed and would continue to add to understanding of the residential centre.

With residential provision as an acceptable form of substitute care already under criticism, a further challenge was to come from the consolidation of evidence on the deleterious effects of mother-child separation. Some pertinent issues had been raised by Bakwin and by Goldfarb in the 1930's [Rutter, 1972].

Subsequent investigations were to have even greater impact [Spitz, 1949] and the question even received some attention in New Zealand [Pickerill and Pickerill, 1946]. In such a climate of opinion the World Health Organization commissioned Bowlby to synthesise the evidence on maternal deprivation and his report of 1951 became the cornerstone of universal research interest which has been sustained ever since [Bowlby, 1953 ; Ainsworth et al, 1962]. While Bowlby attacked the more theoretical issues of maternal deprivation, it was the work of one of his lay co-workers which has had the most direct impact on residential care. The series of films, articles and books by Robertson on the adverse effects of separation anxiety in young children have had a direct and continuing influence on practice in residential child care [Robertson, 1970].

As a further development, Rutter [1972] suggested that Bowlby's original term of maternal deprivation should be abandoned in favour of more precise delineation of cause and effect in child rearing. Nonetheless, he readily acknowledged the debt owed to the original hypothesis and summed-up the extensive evidence that

" . . . many children admitted to hospital or to a residential nursery show an immediate reaction of acute distress ; that many infants show developmental retardation following admission to a poor-quality institution and may exhibit intellectual impairment if they remain there a long time ; that there is an association between delinquency and broken homes ; that affectionless psychopathy sometimes follows multiple separation experiences and institutional care in early childhood." [Rutter, 1972, p.121]

Steady application of research findings has reduced the possibilities of damage to children through exposure to residential care. For example, the largest private child care agency in Great Britain commissioned research in the mid-1960's the outcome of which persuaded them to discontinue their practice of providing training for nursery nurses in

demonstration homes for children<sup>6</sup>. In this case, the critical variable had been the traditional hospital model of serial caretaking which was shown to interfere with emotional development of children. This could be controlled for when the children were able to have stable on-going relationships with a few significant people [Tizard, 1975].

Finally, the major trends in residential child care apparent over the last decade can be summarized in the six points listed below [adapted from Kadushin, 1974].

- [1] There has been an expanded use of the child care institution as a specialized resource rather than as an undifferentiated facility for all children needing substitute care.
- [2] A trend towards the development of smaller residential units and an overall drop in roll numbers. Quantitatively there have been fewer referrals of children, but, qualitatively, these have been of children with more severe problems than in the past.
- [3] In terms of 'institutional climate' there has been a movement away from custody and towards treatment programmes.
- [4] A reported increase in the professionalization and general upgrading of staff at all levels.
- [5] In response to community-based notions of treatment, there have been efforts to 'de-institutionalise' residential centres and to involve parents more actively in programmes
- [6] A general responsiveness to research findings, openness to self-examination and to the possibilities of change.

The concepts underlying these reported movements are considered in more detail in the next section.

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6. Personal communication from V. Cornish, then Director of Child Care, Dr. Barnardo's Homes, 1970. Publication of the initial study by Barbara Tizard was delayed until the training scheme could be phased-out because of the implication that the agency might once have been employing a harmful strategy.

### Tasks, Principles and Methods

Some writers consider residential work to be a residual service, with the prime task of the residential centre being rehabilitation, enabling children to return to their families, to foster families or to achieve an independent life, [Beedell, 1968]. In this view, residential care becomes viable only as a last resort treatment. For others, the primary task is to develop independence in individuals [Balbernie, 1972], or to help in their adjustment to reality [Glasser, 1965]. If a common theme is discernable it appears to be preservation and restoration [Great Britain Home Office, 1970].

However, there seems as yet little consensus on the nature of the residential task or on a set of principles or methods to fulfil that task. The notion of a philosophy of care appears to be polarised between those who eschew theory building and those who consider it essential to clarifying tasks. For example, a position statement on the 'philosophy' of residential care was proposed by a practitioner group in Great Britain. It is prescriptive in that it emphasises : the importance of worker-resident relationships ; the ability to facilitate the life of a group ; respect for the resident as an individual. As such, it tells little about the process of care; indeed, its closing paragraph indicates a theoretically oversimplified stance:

" . . . the philosophy of care is rooted in the very simple things. Today we live in an age of jargon and theoretical values and tend to lose sight of the simple basic care functions." [Great Britain Residential Care Association, 1973]

In contrast to such platitudes, the opposing view states an implicit demand for relevant theory :

"From its beginnings, residential treatment has been operating on a patchwork of theoretical remnants borrowed from child guidance practice, traditional psychotherapy, social group work and special education. The actual practices and standards of evaluation for residential treatment have had more to do with the needs and requirements of the mental health professionals than with the needs of the children such settings were designed to serve." [Whittaker, 1970a].

No doubt a climate will be sought in which both basic care and theory development can flourish equally.

On a more general level, principles and practices in residential care have, in the past, been normally categorised into three broad divisions: firstly, individually centred treatment, in which the one-to-one relationship is the mainstay of the programme; secondly, group-centred treatment, in which programmes revolve around living, work or therapy groups; thirdly, integrative treatment where the child care worker is seen as the pivotal agent and where the total utilization of the whole centre is stressed (Maier, 1965). To these divisions must now be added a fourth in which programmes of individual change are based upon reinforcement theory in a behavioural modification format (Jehu et al, 1972). These latter practices have now been tested tentatively in New Zealand also (Powierza, 1972 ; Watson, 1975). It is noteworthy here that the earliest reported empirical studies on behaviour modification of deviant behaviours arose from work in residential centres, although their use as research laboratories had become commonplace.

"Deployment of social scientists into such [treatment] institutions was a phenomenon of post-World War 11. . . an unspoken block to any great improvements was the low calibre of entrenched staffs. Therefore, a fantasy was nurtured and sold ; that social scientists possess a magic formula through which a constellation of individual sows' ears may, at little cost, be woven into a silk purse staff. . . despite the unpromising nature of certain impulses that led to recruiting social scientists, one major insight gave credibility to the whole undertaking. This was the recognition of just how significant social processes and interpersonal communications are in the etiology of mental illness and other disturbances in the personality. By the same token, group forces are important in maintaining the illness, or infacilitating its cure. The insight was not always so trite as it now seems." [Polansky, 1971].

This re-emphasis on the power of social processes in influencing behaviour was reflected in residential practices. Reaction grew against the individual-centred programme which

reified the formal patient-therapist relationship and ignored the dynamics of everyday residential living<sup>7</sup>. Research interests turned to the somewhat parallel concepts of the therapeutic milieu and the social systems approach.

The notion of a therapeutic milieu for treatment dates from 1925 and has been subsequently refined and enlarged upon (Aichhorn, 1925 ; Bettelheim, 1950 ; Jones, 1953 ; Redl, 1959). Early milieu experiments tended to rest upon psychoanalytic traditions so that planned intervention was made in accordance with the therapists' interpretation of residents' behaviour (Bettelheim and Sylvester, 1949). While the American therapeutic milieu proponents included observations on structure and process within the residential centre (Bettelheim, 1950) their intent was often more prescriptive than descriptive. A similar struggle towards conceptualization of the milieu approach can be seen in reports from several English practitioners (Barron, 1968 ; Beedell, 1970 ; Dockar-Drysdale, 1968 ; Franklin, 1968 ; Shaw, 1965).

While there may be no single model of a therapeutic milieu, there seems to be the common discernable and therapeutic aim of

" . . . a determined administrative and staff dedication to the use of the institutional experience as part of a coherent philosophy of treatment and . . . to the greatest extent possible (the residents') total institutional life is to be pervaded by positive interpersonal relationships with staff and peers." (Shireman et al, 1972)

Such general goals have wide practice implications but little substantive meaning in research and explanation. The use of the concept of therapeutic milieu has now largely given way to systems theory , usually in ex post facto designs.

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7. Note, for example, the title 'The other 23 hours' (Treischman, Whittaker and Bendtro, 1969), an effort to counter the ideal of the daily therapeutic hour conducted by the professional therapist who may be remote from and uncommitted to the residents' environment.

Those approaches will be enlarged upon in Chapter III where consideration will also be given to the organizational approach to residential practices. However, there remains the claim that research may assume too much about the position of the actors - the staff and the children in residence and that the sociologist's first task should be to examine the life-experience of the child in care and to develop a typology which would help to describe the unique social worlds thus discovered [Taylor, 1968]. Some questions in that area will now be explored.

#### The Staff and the Children

The exhortation to clarify the social world of the inmate echoes a more widespread and current interest in obtaining consumer accounts of social services [Mayer and Timms, 1970 ; Timms, 1973] and greater client participation in decision making [Great Britain Residential Care Association, 1973a]. Apart from the 'head-counting' exercises [National Council of Social Services, 1967 ; Packman, 1968 ; Pappenfort et al, 1968 ; Pappenfort and Dinwoodie, 1970] the paucity of information recorded upon the characteristics of children in care has kept this area rather obscure. One of the few avenues for understanding the position of the child in care has been the anecdotal account and the autobiographical 'novel' in the genre of Stewart [1967], Lee [1936 ; 1967] and Bonheur [1970].

If the children have been a neglected variable in residential care research, then the staff sector fared little better. Procedure manuals, described as remnants from child guidance practice [Whittaker, 1970a] have been directed blindly to an audience of unknown size, shape, social and psychological configuration. Despite that lack of precision, there has been strong consensus that in all respects the front-line worker in residential care has occupied a diminished role with undervalued prestige [Diggles, 1970 ; National Council of Social Services, 1967 ; Whittaker and Treischman, 1972].

The child care worker has been depicted as the 'man-in-the-middle',

" . . . positioned directly between the agency and its needs for structure, and the client and his need for individualization. At times the needs of the two systems appear to be in opposition to each other, and the worker then feels the pressure to establish his identity by polarizing the demands and siding with either one or the other." (Birnbach, 1971, p.179)

These pressures have been intensified in those situations where the task has been inadequately specified. Even though a specific job has been outlined through guidelines, the policies may have been too vague to convert into action, and workers have often lacked the power required to implement tasks as they perceived them. An inverse relationship has operated between the amount of exposure workers have had to children in care and their authority to make decisions affecting the life-space of those children (Birnbach, 1971).

The competing notions that residential child care requires of the staff a surrogate parenthood role or alternatively, that they are professional helpers has also been an area of reported conflict (Maluccio, 1970 ; Child Welfare League of America, 1964). Moreover, there has been frank conflict between those staff assigned to custody roles and those perceived to be in treatment roles (Piliavin, 1963). Adults employed in parent roles have been shown to have different perceptions of children in care to social workers who have been only intermittently involved with the same children (Sternbach and Pincus, 1970).

As yet, there is no evidence that practice has caught-up with the claim that

"It is no longer assumed that therapy is the special province for a single professional psychotherapist treating a single resident".  
(Polsky et al, 1970b)

Many centres have continued to exhibit a distinct cleavage between custodial and treatment roles for staff (Street et al, 1966).

Surveys, or more commonly, 'guess-timates', have shown a broad gap between the qualifications of residential workers and those of the more highly trained field social workers (Birnbach, 1971 ; Great Britain Central Training Council for Education and Training in Social Work, 1973). One report hinted at some dimensions of the personality patterns of long-serving residential workers when contrasted with a group who gave up the work after two years or less. Tentatively, it was shown of the samples polled that the long-stay workers tended to be older, less 'warm' and to have fewer social interests than the short-stay group. However, in most respects the samples did not differ significantly from each other nor fall outside of the standard deviations for population norms of the measures used (Aldridge-Morris, 1971). A study of personality structures of child care workers in relation to responses on job-oriented problems concluded that expressed attitudes tended to reflect socialization experiences within the residential centre rather than personal background and characteristics. For example, basically authoritarian characters could respond in democratic fashion, and vice versa, if such responses were demanded by the social press (Krause, 1974).

In the U.S.A., the period from 1960 onwards has shown moves to increase the professionalization of the residential worker (Bettelheim, 1966 ; Maluccio, 1970 ; Mayer, 1965 ; Whittaker, 1970c) and attempts to plan appropriate training programmes (Epperson, 1967 ; Mayer, 1966) using fresh formulations (Seitz, 1966 ; Sherman, 1966). Contemporary thinking appears to be dichotomised between those who want to change the system by training leaders to effect change from within existing systems, and those advocating that agency administrations formulate new programme models which would lead to greater utilization of professional skills.

"These two views are a generic reflection of the dilemma that confronts all concerned with the establishment of a viable child care profession and training programmes for child care professionals. The refrain is a familiar one.

Even if child care personnel are trained at a professional level, they will have little opportunity to obtain commensurate career positions. Too often, their credentials will not be 'portable' or widely accepted, as are those of such colleagues as M.S.W., the Ph.D psychologists, the psychiatrist, or teachers and nurses and their upward mobility will be limited. IF, however, we start by creating meaningful, professional child care positions, there will be too few candidates to be recruited for them - and those who are qualified will be equally handicapped in terms of professional mobility in child care". [Beker, 1975, p.430]

A sense of urgency in reformulating the position of residential workers is apparent also in Great Britain. The widely circulated discussion document of the Central Council for Education and Training in Social Work [1973] focussed attention on a situation generally accepted as in need of re-organizing even before the 'Williams Report' [National Council of Social Service, 1967] pointed-up obvious dysfunctional patterns in staffing and training. As a consequence, the major recommendation of the Working Party on Education for Residential Social Work was accepted by the Central Council and the following policy statement was issued.

"The Council is aware of the urgency of the needs of the residential field and regards with great concern the estimate put forward by the Working Party that only 4% of the staff caring for 395,000 people in residential institutions have an appropriate training. It also appreciates that the responsibility of social workers in residential care is quite as demanding as that of field social workers, and agrees with the Working Party that training of an equal standard is required. The Council has therefore decided that training for residential work shall be of equal length and standard with that of field work within a single but flexible pattern of training and that a common qualification shall be awarded". [Central Council for Education and Training in Social Work, 1973, p.2. Emphasis in original].

The outcome of these proposals has yet to be evaluated. Similar developments are occurring in New Zealand where the Social Work Training Council set-up in 1975 a Working Party on Training in Residential Social Work.

### Summary

Potentially, all children are at risk in experiencing forms of substitute care. Changes in caretaking for the child may lead either to family-type situations of adoption, fostering or small group care, or to staff-inmate environments such as schools, hospitals, nurseries and residential homes. The literature sampled suggests that residential child care is a polymorphous concept that has not yet attained clear definition. With it, variations in assignment practice have not been fully understood and contribute to the difficulty of conceptualizing the field. Even so, many writers see residential care as a residual service and hint, with some justification, that expediency rather than need is the basic admission mechanism.

As well, residential care has been subjected in piecemeal fashion to cross-influences from a variety of therapeutic strategies and sectarian child rearing theories. Little attention has been paid to the characteristics of children in care and only peripheral attempts have been made to grapple with the staffing question.

There seems to be general consensus that despite long-standing promises, residential care as an area of study projects a lack of conceptual clarity, confused goals and ambivalent methods of treatment. Even those approaches that show greatest promise in explaining the dynamics of residential life have not been able to articulate theory and practice. There are, however, indications that forms of care are changing and that development of new models of family and community treatment may make traditional models out-moded and irrelevant. Overall, there is an element of wishful thinking displayed by some innovators. They appear to imagine that by helping practices to change, problems will disappear before the current confused situation demands more attention. Even with new strategies, it seems unlikely that all old problems will be resolved quickly.

Residential child care remains a system in search of identity, a fertile ground for the social scientist at all levels and a challenge for the staff, administrators and agencies concerned for the welfare of children.

## CHAPTER III

### ALTERNATIVE THEORETICAL APPROACHES

#### The Choice of a Research Framework

This chapter reviews the conceptual bases upon which the final model is founded. Previous work in this area is considered as part of the task of adopting a unified theoretical stance and developing a relevant research strategy. The first section deals with the way in which potentially fruitful theoretical approaches are classified. Those studies identified as germane to the problem and of high utility for this study are evaluated and compared in outline. Five of these have a prominent place in the literature of residential organizations and are treated together as Milestone Studies. Finally, some proposals from General Systems Theory are considered.

#### Classification and Evaluation Procedures

This section gives the method used to classify potentially useful theoretical frameworks in terms of utility for this study. Those identified from the literature search as being of high utility were then evaluated in more detail. In gathering sources, the most recent and authoritative review of completed and on-going research into residential child care [Dinnage and Pringle, 1967] was heavily relied upon. All pertinent journals were searched, including Sociological Abstracts, Psychological Abstracts, Dissertation Abstracts and Abstracts for Social Workers. The bibliographies of books and articles in this subject were cross-checked for leads to fresh theoretical formulations.

As the first step in classification, a simple two-dimensional matrix was created using judgments about the scope of theories against judgments of the application of those theories in research practice. The Matrix appears as Figure 3.

Breadth of Theory	Application of Theory		
	Comprehensive	Limited	Individualistic
Overall	1	2	3
Partial	4	5	6
Restricted	7	8	9

FIGURE 3

Utility Classification Matrix for Theories of Residential Organizations

The scale for judgments on the breadth of theory was ranked into overall theory, approximating to the notion of grand theory, partial or middle range theory, and restricted theory based solely on one, or at most, a few concepts. Judgments about the application rested on whether the theory had been tested in a comprehensive fashion, or limited to special cases or applied in an individualistic way which dealt only with one special case. The search concentrated on broad theories which had been widely applied. In the matrix, however, breadth of theory was given greater weight over application on the assumption that explanatory power of any given theory does not rest entirely upon its known operationalization.

The second step was to subjectively rate each piece of literature according to the two dimensions of breadth and application. High utility classification was accorded those studies which fitted into cells 1, 2 or 3 of the matrix. Those studies which were classified in cells 4 to 9 inclusive were discarded as being of low utility. For example, most of the content of the references cited in Chapter II was based upon the authors' experience and intuition and not upon empirical research. Those statements embodied theories which were largely individualistic and restricted, and could assist

only in the most general way in the search for a relevant theory. One such example was the claim that expediency rather than the needs of children has been the predominant mechanism in admission procedures [Kester, 1966]. Although the roots of that generalization may lie in fertile theories of social control, its utility for this present exercise was clearly minimal.

To further illustrate the purpose of the classification matrix, mention is made here of the outcome of weighing-up the variations on the theories of maternal deprivation [Bowlby, 1953 ; Ainsworth 1962 ; Rutter, 1972 ; B. Tizard, 1970 ; 1975]. Most of the applications of those theories were comprehensive enough, but the theories themselves appeared partial by accounting for only some elements in the residential enterprise. Once assigned to cells 4 to 6 of the matrix there was no way they could rise above that limitation.

From the use of that classification procedure for the literature sources six theoretical approaches emerged as most closely meeting the preferred criteria. These were:

- (1) the concept of Total Institutions as proposed by Goffman [1961],
- (2) the notion of Compliance Relations as pivotal to an understanding of organizations [Etzioni, 1961],
- (3) the concept of People-changing institutions as unique organizational types [Street, Vinter and Perrow, 1966],
- (4) the application of Social Systems analysis to studies of the residential enterprise [Polsky and Claster, 1968],
- (5) the development by King, Raynes and Tizard [1971] of the suggestion by Parsons [1960] that organizations which take the Recipients of Service into membership form a distinct organizational type, and
- (6) the claim that social organization can be best explained through General Systems Theory [Buckley, 1967 ; Hearn, 1963 ; Wilkins, 1964].

The first five approaches listed are known to be solidly grounded in research of one form or another. A common linkage can be discerned through their treatment of investigation into the residential organization. Moreover, there is evidence of a sequential and cumulative thread as the later studies acknowledge the earlier ones as 'milestones' towards the development of a theory of organizations. For that reason, they are dubbed the Milestone Studies in this thesis. Each of those approaches will be considered in more detail, but only to the point where their relationship with this present study becomes apparent. To go beyond a sketch of each approach would require moving outside the boundaries set for this study. Nor is it possible to give more than a skeleton account of methodology and outcome in their empirical applications. These five studies are to be reviewed separately and in comparison one to the other with a final summary drawing out the features considered helpful in designing the framework finally adopted.

The sixth approach, General Systems Theory, stands outside the others and will be treated separately.

#### Milestone Studies

Total Institutions: The idea of classifying 'total institutions' as an organizational type was first introduced by Goffman (1961). For him, the encompassing character of certain residential institutions was symbolized through the use of planned barriers to interaction with the greater community. The central feature of such places was seen as the absence of the usual divisions of social life through which the individual tends to sleep, play and work in different places.

Goffman made five rough classifications of his total institutions. First, the refuge for those considered incapable of caring for themselves. Second, those places such as psychiatric and isolation hospitals for people felt to be unable to care for themselves and also posing a potential threat to the community. Third, those custodial centres such as prisons, prisoner of war camps and concentration camps organized to protect the community against real, potential or

imagined dangers. Fourth, those institutions covering army camps, ships, boarding schools, work camps and secret research establishments ostensibly pursuing some work-like task. The fifth and final category comprised religious retreats that often doubled as initiation centres also.

Some critics have claimed that Goffman's total institution concept promised much but delivered little in terms of theory or generalization (King et al, 1971). According to Goffman (1961), such a result was never intended ; he prefaced the work with the observation that his stance was partisan and his method subjective. The interpretation of residential life offered by Goffman bridged the gap between the anecdotal account and the empirical approach to the inmate situation. His use of the ideal type method, however, sacrificed flexibility by forcing stereotyped events into compartments to suit the argument. Using that framework, institutions were either total or not total ; how to discriminate between those that fell into either category remained unanswered.

The Compliance Relations Model : An organizational analysis germane to the residential enterprise has been provided by Etzioni (1961) through his claim that the universal pivot of all social transactions is the notion of compliance. The degree of emphasis upon compliance within each organization differentiates each social unit from all others. Moreover, he claimed that

"Characteristics of organizations such as their specificity, size, complexity and effectiveness each enhances the need for compliance. And, in turn compliance is systematically related to many central organizational variables.

Compliance refers both to a relation in which an actor behaves in accordance with a directive supported by another actor's power, and to the orientation of the subordinated actor to the power applied". [Etzioni, 1961, p.3]

The compliance relationship was said to be a function of two basic elements, the power applied by the organization to the lower participants and the involvement in the organization developed by the lower participants. Thus, a typology of

nine types of compliance relations emerges when these elements are combined as pictured in Figure 4.

Kinds of power	Kinds of involvement		
	Alienative	Calculative	Moral
Coercive	1	2	3
Remunerative	4	5	6
Normative	7	8	9

FIGURE 4

A typology of Compliance Relations<sup>a</sup>

<sup>a</sup> From Etzioni (1961)

Organizations may then be categorised according to the kinds of power predominantly used to effect compliance amongst lower participants divided by the modality of involvement of those participants. The strong associations are found in cells 1 - 5 - 9 of Figure 4 ; coercive with alienative, remunerative with calculative, and normative with moral involvement. The labels coercive and normative are retained to classify the distinct unit and a new label utilitarian is introduced to describe the remunerative-calculative combination.

For present purposes, the only other combination of organizational characteristics of interest in the Etzioni schema is the relationship between organizational goals and compliance, which appears as Figure 5. Once more, Etzioni postulated a three part division of goals but stressed that these are discrete variables without a one-to-one relationship with the divisions given for compliance states. Hence, order depicts the attempt to segregate actors and prevent the occurrence of behaviours and is a negative goal in one sense. Economic goals work towards the production of commodities and services of the organization. Culture goals

". . . institutionalize conditions needed for the creation and preservation of symbolic objects, their application and the creation of reinforcement of commitments to such objects." (Etzioni, 1961, p.73)

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	Order	Economic	Culture
Coercive	1	2	3
Utilitarian	4	5	6
Normative	7	8	9

---

FIGURE 5

A Typology of goals and compliance<sup>a</sup><sup>a</sup>From Etzioni (1961)

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In Figure 5, again, the strongest associations are to be found in the combinations of cells 1 - 5 - 9 under the expectation that coercive organizations hold order goals, utilitarian organizations work toward economic ends and normative organizations are culture-directed.

There is a strong congruence between Etzion's formulation of the coercive organization with order goals and Goffman's total institution concept. However, Etzioni recognises the permeability of organizations and his typologies have a strength which the Goffman all-or-nothing construct lacks. Where the total institution marks-off clear discontinuities between types, the compliance schema allows for continuous variance between classes.

The ultimate test of utility must be the operationalization of these concepts into empirical research. Krause (1974) drew on the Etzioni classification as the theoretical framework for his study of the relationship between staff attitudes and behaviours and organizational factors. In a study of nineteen residential centres for children, which were classified as from least-to-most coercive in function, Krause hypothesized that

- (1) attitudes of staff members would be related to the type of centre in which they were employed, and
- (11) attitudes would be related to the position held.

The Krause findings were entirely consistent with compliance theory and exemplified the power of the theory as an explanatory tool. Staff closer to the lower participants, i.e. the children in care, were more likely to have high

authoritarian-dogmatism scores in keeping with their roles in enforcing order goals. But, as Etzioni's theory suggested, such responses were mediated according to the organizational climate. That is, high authoritarianism-dogmatism scorers were more open, flexible and normative in transactions with children in normative-coercive centres than their counterparts in climates rated as high-coercive.

'People-changing' Organizations : Street, Vinter and Perrow [1966] specified a general organizational type which they call the 'people-changing' organization. Under that term they place schools, psychiatric clinics, monasteries, treatment centres (both residential and non-residential) aimed at modifying deviant behaviours, military academies and commercial 'charm' schools, to list but a few of the broad variety possible. Street et al suggested that a characteristic of this type is the organization not only works with people but also on them. Some alteration in personal identity is the primary goal.

Arising from the human condition of the organizations' 'material' those authors applied six further differentiating characteristics which may be summarised as distinctive values, forms of control, variability of response, non-standardised technologies, diverse belief systems and finally, community surveillance and accountability. Two further broad divisions were posited on the basis of whether 'people-changing' organizations emphasize 'socialization' or 're-socialization', that is, whether they dealt with so-called normal developmental processes or with those labelled deviant.

The centres used as the focus for the research by Street et al were six juvenile correctional institutions chosen to typify three equidistant points on a custody-treatment continuum. The major mediating construct was that of 'goal attainment' wherein centres may be classified according to their stated goals, then various measures of goal attainment applied and classification confirmed or adjusted accordingly.

The definitions for each sub-set were:

"Obedience/conformity. Habits, respect for authority and training in conformity are emphasized. The technique is conditioning. Obedience/conformity maintains undifferentiated views of its inmates, emphasizes immediate accommodation to external controls, and utilizes high levels of staff domination with many negative sanctions. It is the most custodial type of juvenile institution presently found in the United States, for humanitarian pressures have eliminated the incarceration-deprivation institution as a viable empirical type.

Re-education/development. Inmates are to be changed through training. Changes in attitudes and values, acquisition of skills, the development of personal resources, and new social behaviours are sought. Compared to the obedience/conformity type, this type provides more gratifications and maintains closer staff-inmate relations.

Treatment. The treatment institution focuses on the psychological reconstitution of the individual. It seeks more thoroughgoing personality change than the other types. To this end it emphasizes gratifications and varied activities, with punishments relatively few and seldom severe. In the individual treatment-variant considerable stress is placed on self-insight and two-person psychotherapeutic practices. In the milieu treatment-variant attention is paid to both individual and social controls, the aim being not only to help the inmate resolve his personal problems but also to prepare him for community living." [Street, Vinter and Perrow, 1966, p.21]

Earlier, the authors had postulated a 'mixed-goal' type in which custody and treatment would be equally emphasized but none of the six centres studied could be so classified. Significantly, the notion of mixed goals and bifurcated goals played a large part in their analyses and testified to the paucity of exhaustive categorization using a one-dimensional measure.

The research strategy was finalized after initial exploration and observation in each unit confirmed suitability for inclusion and revealed sufficient data on the formal and informal structure, official terms and local argot to enable construction of instruments. The initial study was

replicated one year later during which the centres were monitored by visits and seminars. Some modifications were also made to the questionnaire used. Respondent data were collected formally through the use of separate questionnaires administered to staff and to inmates. These questionnaires were mixtures of closed items with Likert-type scales, open-ended questions and sociometric choices.

Generally, the results reported by Street et al are self-fulfilling prophecies. Having selected and categorized units according to their typology they were able to show that there were sufficient similarities to warrant inclusion as a single genotype, yet demonstrable differences to support the contention that organizational goals were a critical feature. As 'action research', the effect of the involvement of the researchers was also hypothesized and confirmed. Those centres which were labelled as custodial showed less flexibility to change than the treatment-oriented. However, the underpinning notion of the 'people-changing' organization denoted as an organizational type seems to lack clarity because the exceptions, the combinations and permutations of criteria, are so immense.

Despite this reservation three features of the Street et al study were noted. Firstly, they evolved a research strategy which transcended the traditional 'matched-groups by outcome' approach to the study of juvenile residential centres, by comparing two samples of the same organization at time intervals. Secondly, they were able to accommodate a value stance, a belief that treatment models are more productive in humanitarian terms than custodial models of care. Thirdly, the rhetoric associated with the Goffman approach was preserved through presentations of the definitions of the situation as perceived by the actors involved. In particular, it was still quite innovative in the early 1960's to attempt to sample 'inmate' attitudes and perceptions in contrast to the usual psychometric and attainment measures. Finally, despite the doubtful overall theoretic framework, the lower-level constructs articulate smoothly with the hard data obtained

fulfilling in part Etzioni's [1961] concern that a greater variety of middle-range theory needed to be nurtured.

Social Systems : Polsky has been a regular contributor to the development of social systems theory applied to residential life. His pioneering study 'Cottage Six' [1962] was the forerunner to the main work reviewed below [Polsky and Claster, 1968]. In promotion of the social system approach these authors, together with Goldberg, later edited a collection of readings on this theme [1970]. Latterly, Polsky has also attempted a rapprochement of his orientation with general systems theory [1969].

Polsky has used and developed the social system theory of Parsons, Bales and of Homans, with particular emphasis on that aspect known as functional imperatives of small social systems. Homans' conception of the external and internal dimensions of groups was fused with Bales' model of goal-seeking behaviour and postulated at a more general level of abstractions by Parsons, leading to the new synthesis shown in Figure 6.

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	Instrumental	Consummatory
External	Adaptation	Goal attainment
Internal	Pattern maintenance and tension management [latency]	Integration

FIGURE 6

Parsons' Fourfold Functional Imperatives of Groups<sup>a</sup>

<sup>a</sup> From Polsky and Claster [1968]

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The cell labels of Figure 6 are then defined as

"1. Adaptive function : members' regulation to physical and social facilities and authorities external to the system, including manipulation of outside forces, groups and individuals, which result in a favourable balance between the system and its external environment.

2. Goal attainment function: accomplishment and

enjoyment of goals that emerge from within the system and are enacted in the environment.

3. Integration : activities directed to the adjustment of relations of members to each other within the system.
4. Pattern-maintenance and tension management [latency] : activities directed toward maintenance of motivation of individual members of the system, affirmation and identification with group values." [Polsky and Claster, 1968, p.8]

That paradigm was adopted by Polsky and Claster who wrote that, according to system theorists, it could be used for any durable pattern of social interaction. Within the microcosm scrutinised by these authors, they saw the separate cottage units as representative of the internal system and all the cottage units, together with the larger institution, making-up the external system. That relationship is shown in Figure 7.

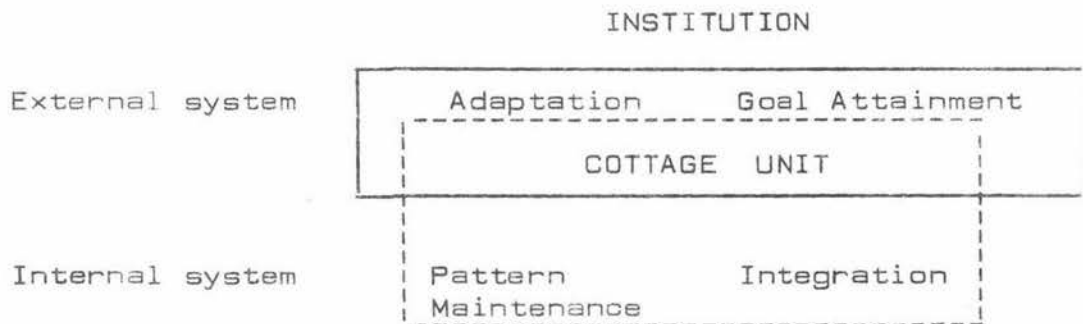


FIGURE 7

Relationship Between Cottage Units and Larger  
Institution in Terms of Parsons'  
Functional Imperatives<sup>a</sup>

<sup>a</sup> From Polsky and Claster [1968]

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The critical operation in systems theory has been the assignment of equivalence of roles and events with so-called system phases. The equivalence relationships posited by Polsky and Claster are reproduced in Figure 8.

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<u>Functional Role</u>	<u>System Phase</u>	<u>Event</u>
1. Nurturer, comforter, supporter.	Pattern maintenance & Tension management	Support
2. Counsellor, guide, teacher.	Goal attainment	Guidance
3. Mediator, integrator, Friend.	Integration	Integration
4. Custodian, monitor supervisor.	Adaptation	Monitoring

FIGURE 8

Correspondence between Functional Imperatives and Major Roles of Staff and Events within Cottage Social Systems<sup>a</sup>

<sup>a</sup>From Polsky and Claster (1968)

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Using those relationships, the authors categorised staff actions into the corresponding system phases. For example, the staff member who chose the functional role of comforter (line 1) was contributing to pattern maintenance and tension management within the internal system of the cottage. The terms listed under event were used throughout the study to label the outcome of these interactions.

These then were the basic elements underlying the comparison of three cottage units within a large residential complex for boys. Using observational techniques, the authors obtained three measures for modes of staff functioning, counsellor methods and inmate peer group interaction. These were contrasted between cottage units and correlated overall.

The authors were able to support their hypotheses that certain behavioural responses would lead to discernable interactional patterns between management, cottage staff and inmates. However, in presenting the outcome, direct inferences of cause and effect were eschewed in favour of 'in depth' explanations of the operating dynamics in each situation.

Methodologically, the Polsky and Claster design was fraught

with problems arising from the number of steps between abstract construct and final data record. Further, the five student observers who were trained to record responses could conceivably have held or developed pre-dispositions towards staff and inmates which would contaminate the records. Paradoxically, that somewhat cumbersome strategy helped to point-up the multi-faceted dimensions of human personality and response. Other gross measures which label the respondent, staff or inmate, as 'good' or 'bad' or the custodial unit as 'coercive' and therefore 'inhumane', fail to take account of the kinds of shading of response obtained in that study.

Recipient as member : In their study, King, Raynes and Tizard (1971) felt that whilst most writers agreed on the essential ingredients of organizations, few had been able to completely define the extent of the field in strictly theoretical terms. They went on to say that

"... some complex organizations, however, as Parsons has pointed out, can be distinguished from others by the fact that they take the customer into the organization. In these organizations 'The recipient of the service becomes an operative member of the service providing organization' (Parsons, 1960). Residential institutions, so we understand them here, are characterized by this feature, and constitute a distinctive sub-type of complex organizations." (King et al, 1971, p.35)

While rejecting Goffman's totality dichotomy as too crude for their purposes, King et al acknowledged that the aspects of staff-inmate interaction in his work seemed the most significant. They attempted to operationalize facets of this interaction along the dimension they termed child management. Thus, in similar fashion to Street et al (1966), a continuum was built ranging from units labelled as institutionally-oriented to those called child-oriented, equated respectively with presumed negative and positive experiences for the development of children in residence. The institutional orientation consisted of those practices thought by management to be maintaining rules, routines, regimented behaviour and enforcement of the inmate

role<sup>1</sup>. Child oriented management, on the other hand, allowed for personalization and individuation and minimal separation of the inmates from the staff world or the larger community.

From observations in a field study of eighty centres a child management rating scale initially of some 15 items was revised and extended to a 30 item scale. That revised scale was used in the major survey of sixteen fresh residential centres which were categorized by: the size of the units; characteristics of children in care; staff-child ratios; staff continuity and staff roles and duties.

Thirteen hypotheses were tested. Only Hypothesis One is relevant here. This stated that large and characteristic differences between institutions of different types would be expected, and this was substantiated by the figures which are reproduced below as Table 1.

TABLE 1

Mean unit scores, standard deviations and range of scores on fifteen-item scale of child management for all institutions : field study and survey.<sup>a</sup>

	Establishments	No. of units	Mean Score	SD	Range
Field studies	Children's homes	57	1.78	1.56	0-6
	Mental subnormality wards	15	24.20	2.51	21-28
	Paediatric wards	5	19.40	1.34	18-21
	Local Authority hostel	1	6.00	-	-
	Voluntary homes	2	12.50	2.12	11-14
Survey	Hostel units	8	5.88	4.26	0-11
	Hospital wards	5	22.60	0.89	22-24
	Voluntary homes	3	15.70	6.66	10-24

<sup>a</sup> Reproduced from King, Raynes and Tizard [1971, p.139]

1. King et al wryly comment that many entrenched institutional practices seen were, in their opinion neither efficient nor convenient but simply served to deny the individuality of the children in residence.

King et al produced a tightly reasoned study, the culmination of minute investigation through the literature and the child care enterprise. The conceptual linkages presented were very plausible and could be reduced to this argument: There is a form of organization, 'A', distinguished from others by the practice of taking the recipient of the service into the organization. 'A' has a population of units  $M_1, M_2 \dots M_n$  which, by applying a scale of management behaviours, may be ranked from P through to Z. Supporting research proposes that units of type P [low scores on scale] were more conducive to child development than others. Therefore, as most hospitals and hostels for the mentally subnormal fell towards type Z [high scoring], mentally subnormal children in care were not favoured with the best group child-rearing environments.

Additional strength appears to have been given to this study by the construction of instruments which were able to discriminate clearly between the units investigated. Instrument validity was high as most of the events being rated were reduced to pre-coded categories. Although the units under consideration had been defined as one class, they would not have been so grouped within the conventional assignment model offered in Figure 2. On the basis of that earlier argument one would expect, therefore, to find quite significant differences between the medical traditions of hospitals and the social emphasis of children's homes. Even in units comparable in size, staffing and so on, those units for the mentally subnormal were more like their parent hospital than their counterpart for the 'normal' child.

Were it not for the decision to use children's homes as the anchor against which to measure handling practices in other care facilities, the King et al thesis would have been of little interest here. As Project RCC was limited to exclude all facilities except the social-therapeutic, there seemed little comfort in reversing the argument and repeating the axiom that the hospital-oriented, task-assignment methods of child care have little to offer the 'well' child in care.

The sole question which remained was whether the King et al strategy would show equal versatility when attempting to discriminate between units all classed as Homes? Certainly the instruments would fail to do so as they were constructed on behaviours observed across a range of hostels, homes and wards. The two preceding studies reviewed showed that task to be more difficult as the selection of events to be judged and the individual differences between the resident population became more a matter of fine degree.

Overview : None of the Milestone Studies alone offered theory or operational research strategies considered sufficiently relevant or powerful for the problem stated for this study, although each had something to contribute either positively or negatively. Two general pointers were deduced from those studies:

- (1) The inclusion of inmate views gave an important dimension to understanding process in residential centres.
- (2) The studies strongest in linking overall theory with their reported outcomes were those which had a framework of middle-range constructs tracing developments from the general to the specific.

#### General Systems Theory

The sixth and final approach reviewed had neither a special claim upon residential child care nor one single study which could be offered as the epitome of research practice. Rather, the appeal of General Systems Theory lies in its basic assumption that all collectivities can be regarded as systems and that all systems have discrete properties that can be studied. Similarly, individuals, small groups, and all forms of human organization can be seen as systems with common properties. One seminal paper on General Systems Theory suggested it

". . . is a name which has come into use to describe a level of theoretical model-building which lies somewhere between the highly generalized constructions of pure mathematics and the specific theories of the

specialized disciplines

. . . At a low level of ambition but with a high degree of confidence it aims to point out similarities in the theoretical constructions of different disciplines, where these exist, and to develop theoretical models having applicability to at least two different fields of study. At a higher level of ambition, but with perhaps a lower degree of confidence it hopes to develop something like a 'spectrum' of theories - a system of systems which may perform the function of a 'gestalt' in theoretical construction. Such 'gestalts' in special fields have been of great value in directing research towards the gaps which they reveal." [Boulding, 1956 : p.197]

General Systems Theory has been adopted in a wide range of disciplines. Much of that work has been towards the development of a general paradigm of the basic mechanisms underlying the evolution of complex adaptive systems [Buckley, 1968a]. It has been claimed that the behavioural sciences have arrived at a junction at which the synthesis of sub-disciplines has challenged modes of simple analysis or categorization.

"Not only is there growing demand that the 'cognitive' 'affective' and 'evaluative' be conceptually integrated, but that the free-handed parcelling out of aspects of the sociocultural adaptive system among the various disciplines [e.g. 'culture' to anthropology, the 'social system' to sociology, and 'personality' to psychology] be reneged, or at least ignored. The potential of the newer system theory is especially strong in this regard." [Buckley, 1968b, p.509]

Complex Adaptive Systems : The features of General Systems Theory applied to the study of the complex adaptive system have been summed-up under nine main points:

[1] A focus on the relations between components of systems has grown out of dissatisfaction over the traditional scientific concern with the substance of entities.

[2] Complex adaptive systems must be seen as open systems dealing with the consequences of fresh stimuli, known as environmental variety. The concept of equilibrium developed for closed physical systems

has been abandoned in favour of the idea of dynamic interchange between system and environment. A new understanding of such systems has come through examination of the nature of their components and the relation between those components in terms of the transmission of information and the development of feedback operating internally and externally upon the system.

[3] In contrast to traditional social systems theory, the general systems approach has sought to accommodate a time-orientation, a process perspective and the notion that apparent dissension, conflict or deviance leads to the re-structuring of systems.

[4] The maintenance of a given system may be dependent upon its adaptive capacity. Therefore, the constancy of most social systems is one of change rather than the constancy of the status quo.

[5] The analysis of structure and process requires a time perspective.

[6] Process is emphasised in an attempt to include all combinations of system operation. Within such process analysis, the features of the mapping and contrasting of the interacting units becomes important to clarify not only the structural elements but also the dynamics underlying that structure.

[7] The concept of the institutionalized common value system as the sole legitimate pattern or conformity measure has been rejected. Instead, it is proposed that values must be seen as relevant to the reference point selected by the observer.

[8] As an organization changes, its directions and boundaries change and reform. The general systems approach has conceived social systems as having two levels of structure, the higher, sociocultural, level being largely a reflection of the shifts and changes occurring at the lower, inter-personal,

level. Or put more forcefully,

"We do not have a sociocultural system and personality systems, but only a sociocultural system of constrained interactions among personality systems."  
[Buckley, 1968b, p.510]

[9] The general systems approach in the study of complex adaptive systems will enhance the development of the conceptually fertile area of decision theory which has promised increased predictive power in the study of organizations.

The crux of the general systems approach applied to social systems is reliance upon the morphogenic (or evolutionary) model and the axiom that social structure must be generated in, and continue to have its roots in, social interaction. Moreover,

". . . sociocultural structures are partially independent of both ontogenetic and phylogenetic structures, and the mappings of many individuals are selectively pooled and stored extrasomatically and made available to the system units as they enter and develop within the system." [Buckley, 1968b, p.494]

The ontogenetic structures that Buckley refers to are derived from a view of personality and behaviour founded on the interactive process model. That model postulates that the interpersonal matrix is a recurring functional relation between these three components ;

- [1] aspects of the self-concept of the person,
- [2] his interpretation of his behaviour related to that aspect and,
- [3] his perception of related aspects of the other with whom he is interacting. [Secord and Backman, 1961].

There was evidence that this outline alone did not adequately specify all the variables necessary to explain how the interpersonal matrix contributes as a component in the continuous transaction within the adaptive system. That material is reviewed in further consideration of perceptual process.

Perceptual Process : Warr and Knapper's [1967] model of perceptual process, which accounted for most current psychological issues in perception, was chosen to guide theory development in this study. An adapted form of their schematic representation of perception is presented as Figure 9. Any summary of a complex, dynamic and sequential but rapid psychological process becomes even more difficult when graphic representation is attempted ; that diagram cannot adequately depict the information flow or time factors involved in perception.

In the Warr and Knapper schema, Figure 9, perception is treated first as a function of stimulus relevant information drawn from the present stimulus (item a), the present context of the perceiver (item b) and that stored from past experience (item c). The mechanism governing whether or not the stimulus will be fully attended to and which elements, if any, are selected is conceptualised as an input selector (item d). Part of that selectivity is said to arise from the perceiver's stable characteristics (item e) such as personality attributes, cognitive styles, age, sex and other variables of that type. Current state (item f), a more transitory form of perceptual readiness relating to mood and affective states, also influences both the input selector and response.

The notion of processing centre (item g) is treated as a set of decision rules. Those rules are divided into two broad types: firstly, inference rules concerned mainly with single cases, for example, from the stimulus of posture the perceiver may infer aggression; secondly, combination rules are postulated as prescriptions about inferences from compound sets of individual inputs. Such rules may also include probabilistic judgments about the stimulus.

The three components finally postulated in that schema deal with judgments about the stimulus which will help to shape the response. These suggest that the perceiver classifies stimuli (item h), makes predictions about them through information on expected behaviours (item i) and responds towards them in certain emotional ways.

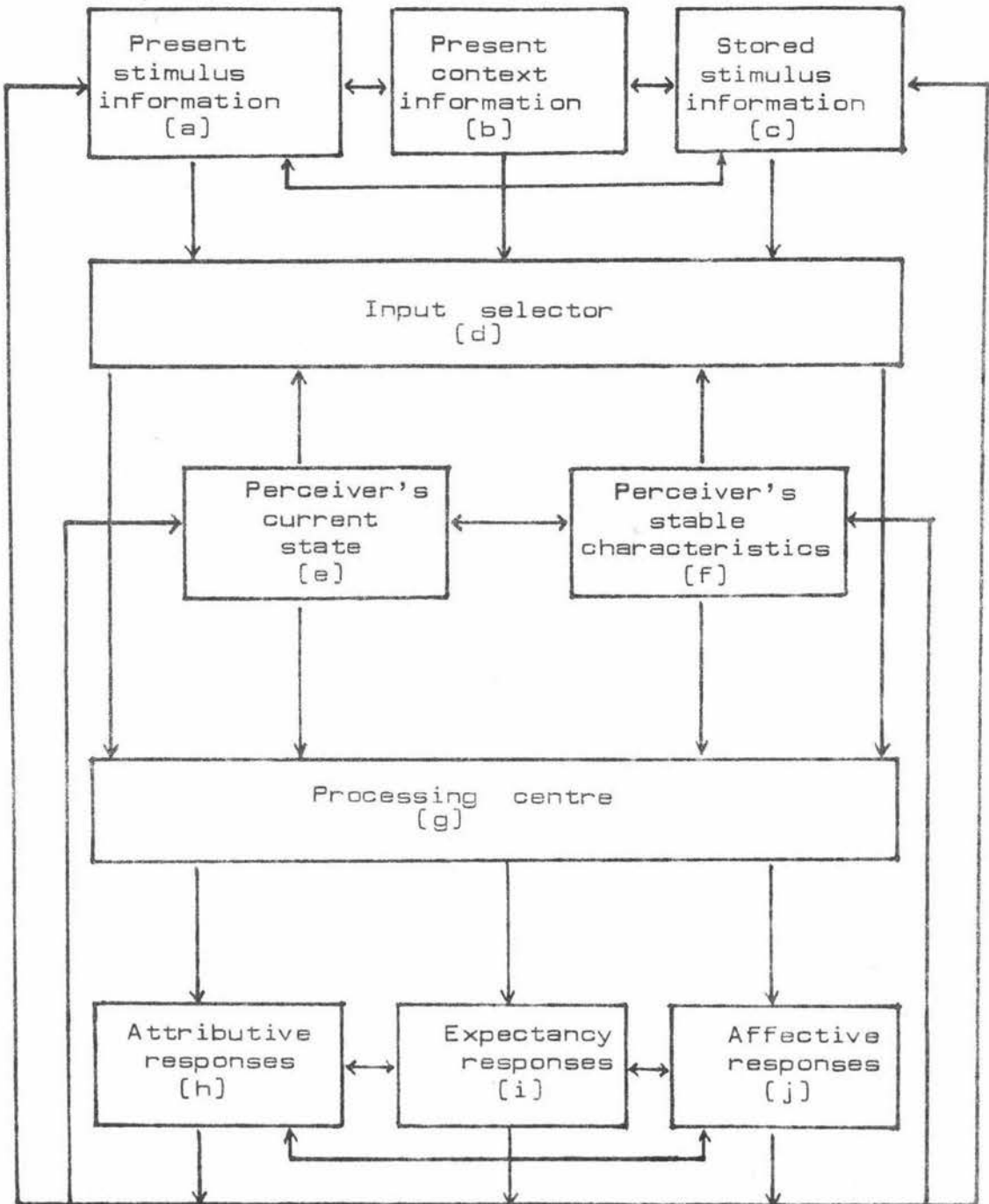


FIGURE 9

Schematic representation of individual perceptual process.

<sup>a</sup> Adapted from Warr and Knapper [1967]

While this schema appeared to give a more comprehensive understanding of the elements involved in perception, compared with the interpersonal interaction variables proposed by Secord and Backman [1961], neither fully accounts for all the conditions of perceptual influence. Stimuli can be perceived, and responded to, under five different conditions. That is, perception may be either direct or indirect, there may or may not be interpersonal interaction, and, in the case of indirect perception, the stimulus might have occurred in the past. Those perceptual categories, adapted from Warr and Knapper [1967] are shown in Figure 10.

The following generalizations were drawn from the review of elements of the perceptual process. Firstly, there is a sense in which all "knowing" is indirect, through the inferential processes which cognition imposes in interpreting and organizing perception. Secondly, human perception is conditioned by experience. Thirdly, perceptual-process is usually represented as an orderly transformation of coded information. Finally, in the realm of social perception, persons organize their perceptions of themselves and others into compound interactive sets - or roles. The mechanism of role-taking is now examined within the broad concept of role.

Role Concepts : Traditionally, the term role has been used in many ways and with differing meanings and implications. Role has been assigned as the basic factor in socialization, the expression of personality as the sum and organization of all the behaviours of the individual in social transactions. The term has also had currency to express culturally defined patterns of behaviour, and, as an extension, used to imply defined social norms which dictate reciprocal action. Role has been used as a synonym for behaviour and as the individual's assumption of or assignment to the performance of a 'R part' in a specific situation.

Until recently, it has been of doubtful usage to write of role theory. Rather, it has appeared more correct to assume

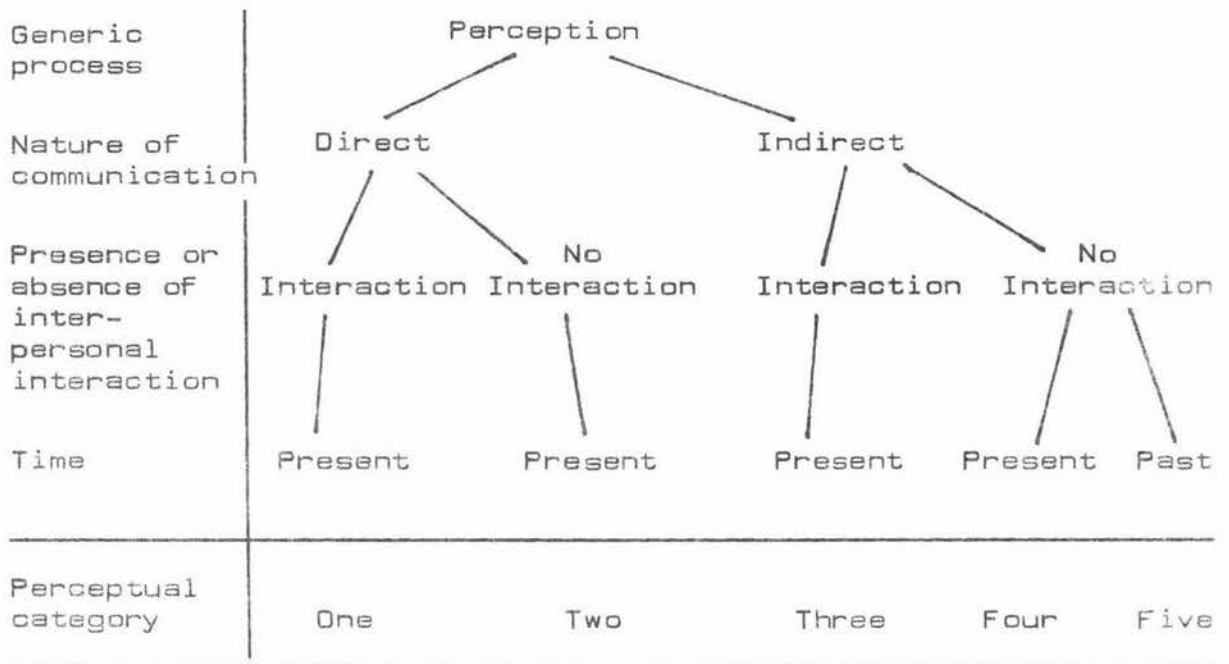


FIGURE 10

Types of perceptual situations shown in terms of three conditions [direct/indirect/interaction/no interaction, present/past behaviour].<sup>a</sup>

<sup>a</sup> Adapted from Warr and Knapper [1967]

that there have been a number of concepts about the nature of role some of which have features in common (Deutsch and Krauss, 1965). Earlier conceptions of social interaction appeared to assume that persons who occupied similar positions tended to show similar patterns of perception and behaviour germane to that position. That stance has been labelled the conformity model of role, and has been said to rest upon the three key notions of conformity, expectation and approval. The relation between those terms has been succinctly explained as follows.

"A component of each role is set of expectations regarding the behaviour of individuals in relevant other-roles. When ego takes the role of alter the aspect of alter's role to which he is crucially sensitive is the set of expectations with respect to his [ego's] role. Ego takes the role of alter in order to conform to alter's expectations. Lack of conformity must be explained by erroneous role-taking, or by deficiencies in empathic ability or opportunity to perceive and judge the role of the other. The confirmation that role taking and role playing have proceeded correctly according to the conformity principle is the registration of approval." [Turner, 1962, p.32]

Turner suggested that such a model is not in itself incorrect but rather is of insufficient generality. The later formulation, labelled the dynamic model, on the other hand, has attempted to provide for all the combinations and permutations that arise from perceptions received and self-presentations conveyed between the actor and others in the role-taking situation. The complexity of the interactions between the variables postulated for an understanding of perceptual-process in the preceding section would seem to lend support for expecting variety in response rather than conformity. The formulation of role-taking, proposed by Turner [1962], has the best goodness-of-fit with the general systems approach. It is, he suggested, a process

". . . whereby actors attempt to organize their interaction so that the behaviour of each can be viewed as the expression of a consistent orientation which takes its meaning [or consistency] from its character as a way of coping with one or

more other actors enacting similarly consistent orientations. Conformity to perceived expectations is but one special way in which an actor's role playing may be related to the role of relevant others. From this viewpoint, role behaviour in formal organizations becomes a working compromise between the formalized role prescriptions and the more flexible operation of the role-taking process."

[Turner, 1962, p.38]

Further concepts and constructs in the growing theory of role have been left unexplored at this stage. That concept, together with the ideas introduced in this chapter, is taken-up again in the description of the research model which is presented in the next chapter.

CHAPTER IV  
A RESEARCH MODEL FOR APPLICATION  
TO RESIDENTIAL CHILD CARE

Introduction

In this chapter, the issues raised in the review of theoretical approaches are synthesized into a problem-oriented research framework which is described in outline first.

The study began with the fact that there were two major but separate systems of residential child care, one operated by the State through the Department of Social Welfare, and the other by non-State agencies. Some basic characteristics of the people, staff members, young persons in care and associated specialists who make-up those systems, were to be surveyed to provide a base. To this end, the participants were to be classified according to designated role-positions in role groups, and by gathering from each group, some responses which reflected perceptions of their own roles and those of others, hypotheses about perceived role-interaction within and across the two systems were to be tested.

In relating the steps towards the implied goals this chapter elaborates critical notions of perceptions, role-interaction and the system matrix, states its theoretical propositions, defines its terms and finally, lists its hypotheses.

In this study, the central notion of perceptions was conceptualised as general patterns of response towards significant features of their environment revealed by the groups of individuals surveyed. This pre-supposed that there was a certain regularity in the way individuals were assigned to their designated positions. That regularity would be accompanied by ties between persons arising from such characteristics as age, sex, similar educational and life experiences. Not only were those common elements critical in determining each individual's initial location and designation within the system, but were also essential

in confirming and maintaining identity for them in taking a role within a role-group [Breiger, 1974].

The term role was used in this study as a synonym for position or designation. There seemed to be a sense in which the generalised role attributes transcended the individual role incumbents. Just as the complex adaptive system persists, in one form or another, so too would divisions within it, based upon measurable criteria, also survive. Although it was expected that those criteria, as with the nature of the system, would change from time to time, measurement of such change was beyond the bounds of this study. Early in the development of research interests in specific fields there have been searches for relationships based often on a descriptive survey [Wolins, 1960]. That condition applied in this instance. Traditionally, social surveys were considered to be necessarily atheoretical, in that the social surveyor did not formulate theories or hypotheses about the field but simply proceeded to organize established facts. That the survey method could simulate experimental conditions has led to acceptance of ex post facto experimentation upon data obtained [Massarik, 1967]. As survey-type research, the focus in this study was upon the total systems rather than upon the individuals within them. Thus, the notion of system-matrix was used to indicate the relationships between the role-groups devised for the survey.

#### Theoretical Propositions

The structure of the theory underpinning this study hinged upon these six cumulative propositions listed below:

1. That persons tend to respond to stimuli representing other persons, generalised roles and objects as they perceive them to be at that time
2. That such perceptions will be influenced by past experiences, present situations and expectancies about the future
3. That persons who occupy equivalent positions within organizations will tend to show similar patterns of perceiving stimuli germane to that position

4. Given that there is a general pattern of role-specific perception, there will remain a significant amount of variation between individuals within role-groups which must be explained in terms of decisions about role-taking
5. That it is possible to obtain meaningful measures of role-group perception towards the self, generalised roles, persons and objects
6. That such measures can be cast in the form of a system-matrix and used to show interrelationships within the population surveyed.

The next stage in the operationalization of those propositions and the concepts introduced thus far was to specify them in more concrete shape in the following sections.

#### Operational Definitions

This section lists in alphabetical order the terms and concepts used in this study and identifies the empirical referents by which certain of those terms were transformed into variables [see also Appendix K].

Age , used as a variable Age, was computed from respondents' statement on the year of their birth. Whole years only were used.

Agency , used as a variable Agency, was computed from the variable Unit. It designated the controlling authority for each centre surveyed. For example, the many offices of the Psychological Service were all subsumed under the agency of Department of Education.

Bi-polar Adjectives refer to the fourteen pairs of polar terms, or antonyms, used as anchors for the response alternatives in the semantic differential scales. For example, Good - Bad. Census Day was the device used to nominate a fixed date for the completion of survey instruments. Actually 17 September, 1975.

Institution was used synonymously with residential child care centre, and portrayed as discrete organizations under the variable Unit.

Instrument was used as an abbreviation of Survey Instrument, the form used to collect all data used for analysis.

Population was first broadly defined as all persons falling within the role-groups used to differentiate respondents.

Position related to designation or title, and respondents with equivalent titles or in similar positions were assigned to specific role-groups.

Race , used as a variable Race, was tabulated from the self-reports of respondents whether they considered themselves Maoris, pakehas or of other ethnic origin, or combinations of two or more.

Region , used as a variable Region, was coded from town of present residence specified by respondents, which were then categorised into twenty-three distinct geographical regions.

Residential Child Care Centre, for the purposes of this study, was defined as any institution listed in the directories of Registered Children's Homes or the Department of Social Welfare shown to have a capacity to care for ten or more children or young persons.

Respondent meant an individual in the population for whom a survey instrument was returned.

Respondent descriptors was the umbrella term used to label all the variables characterising respondents apart from responses to the semantic differential scales , variables 001 to 252.

Role signified the term used to equate all persons of equivalent position or similar designation under one general title.

Role-group comprised all respondents assigned to a common role. There were ten role-groups now shown below with some sample designations alongside :

1. Director . Included Directors, Assistant Directors, Chairmen, Secretaries of Boards of Management, and statutory managers.
2. Social Worker . Social workers, welfare officers and personnel operating from an agency office but with connections with a residential child care centre.
3. Principal . Included assistant principals, and all resident heads of children's homes. Therefore, in some non-State centres more common designations of Matron or Housemother were translated to Principal to signify that the respondent was the person in charge.

4. Housemaster . This role-group included all persons in positions of responsibility within residential centres but at ranks lower than head or deputy head. Female equivalents, such as housemistress or housemother were incorporated in the male term.

5. Ancillary Workers.. An umbrella term to cover all persons not otherwise labelled such as cooks, gardeners, matrons' assistants. Those positions were intended to be specifically excluded from the survey, but the variety of nomenclature prevailing throughout the two systems made it impossible to list each position. Thus when a valid response was made from a non-designated role there was an open category available.

6. Visiting Professionals included medical personnel, dentists, part-time teachers and others who provided periodic services on a fee for service basis.

7. Teachers . Full-time recognised teachers in schools attached to the residential child care centres in the survey.

8. Young persons . All children and young persons in care resident in the homes on Census Day, over the age of thirteen years, i.e. born on or before 17 September, 1962.

9. Matron . Included sub-matron, and the senior domestic staff, except where that designated the incumbent as resident head, as in number [3] above.

10. Psychologist . All psychologists employed by the Department of Education Psychological Service who were regularly consulting on children in children's homes included in the two directories of homes.

Role-groups [1] to [9] above were then further refined by splitting each into State and non-State groups, giving nineteen distinct role-groups which comprised the data file sub-files. <sup>1</sup> That distinction was unnecessary in the case of psychologists who were all state-employed.

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1. The computer programme required for each role-group a label with a maximum of six characters. Those labels are shown in Appendix M

Stimulus Item was the term used for each of the eighteen sets of "key words" representing roles, persons and objects which respondents were required to judge

Years , used as a variable Years, was computed from respondent's statements on the number of years they had been associated with child care.

### Hypotheses

The major focus in this study was to examine whether some important differences were to be found between State and non-State personnel comprising the population in residential child care. The search for such differences was conducted at two levels. It was deemed essential to ascertain some parameters of the population and to describe some characteristics of it. From that data, comparisons of the role-groups within the two systems were to be made at the descriptive level. Once those comparisons were made, the study would look for more qualitative differences between the two systems at the association level. Drawing on the measured perceptions of the population towards meaningful roles, persons and objects, it would be possible to specify whether certain patterns of perceptions were associated in greater or lesser degree with one system or the other. At the same level, features of each role-group were to be considered in relation one to the other.

The first set of hypotheses were proposed in the null form as there was no cause to suspect that the two systems would differ markedly from each other in their independent variables.

Hypothesis I. No significant differences will be observed when State and non-State equivalent role-groups are compared in geographical distribution.

Hypothesis II. No significant differences will be observed when State and non-State equivalent role-groups are compared by numbers of males and females.

Hypothesis III. No significant differences will be observed when State and non-State equivalent role-groups are compared by mean ages in years.

Hypothesis IV. No significant differences will be observed when State and non-State equivalent role-groups are compared by the ethnic origin of their members.

Hypothesis V. No significant differences will be observed when State and non-State equivalent role-groups are compared by the mean number of years their members have been associated with child care.

The second set of hypotheses concerned the perceptions of the population based on the inferences to be drawn from responses to the stimulus items used in the survey. However, previous research has shown that both sex and age of respondents can account for a large amount of the variance in the way in which perceptual processes operate [Tagiuri, 1968]. Warr and Knapper (1969), in their review of the influence of individual differences on perception, consider both these variables and on the question of sex differences they write that

" . . . as far as the judgment of emotion and the accurate perception of self and others are concerned, the findings are equivocal ; there is some indication that women assume more similarity than men. Most of the differences between male and female judges are found in experiments which allow subjects to give free descriptions of stimulus persons. From these studies we have some evidence that women tend to give fuller and more favourable descriptions, make more inferences, and may use different categories than do men [Warr and Knapper, 1969, p.190].

And, in the case of person perception, the same authors [1969, p.194] suggest that female judges are liable to make more positive responses than males when the stimulus person is unknown.

The evidence on the influence of age in perceptual-process is less equivocal. Nevertheless, it seems that the consequences of age differences has not yet been specified with any precision in relation to perception. The best that could be inferred at this stage was that older respondents tend to perceive stimulus items in a manner different from younger ones. Consistent with Theoretical Proposition (2) , the influence of both those variables were predicted.

Hypothesis VI. The perceptions of respondents is a function of their sex role therefore males will show a different pattern to females by less positive responses to stimulus items.

Hypothesis VII. Perceptions are also a function of age and younger respondents will show a different pattern to older persons in their perceptions of stimulus items. Responses of younger persons will be more extreme and show larger standard deviations from the mean.

Further hypothesis to be postulated took account of the potential influence of the variables of sex and age which were then controlled for. Two further general characteristics in which the population differed were known and their influence upon perception could be tested. On the one hand, the State system was known to be more concerned with juvenile offenders than was the non-State system (Department of Social Welfare, 1973). The latter, on the other hand, was known to be largely controlled and sponsored by religious agencies. On this basis the following hypotheses were formulated.

Hypothesis VIII. Over-familiarity with procedures and roles in the field of juvenile offending determines perceptions of those associated roles and objects (e.g. Magistrate, Policeman, and Delinquent) so that the judgments of State system respondents will be less positive than those in the non-State system.

Hypothesis IX. A commitment to Christian doctrine will be reflected in responses to relevant items (e.g. Church, A Poor Person, and Orphanage). In those areas, non-State respondents will be expected to be more positive in their judgments than are the State sector.

On the matter of perceptions of family, social and ethnic relations and political attitudes, there seemed to be no reasons why the two systems as separate wholes should show differences between them.

Hypothesis X. It is expected that the patterns of responses of both systems will show no significant variation in perceptions of family and social relations when expressed

through stimulus items germane to those areas (e.g. Mother, Father and Friend).

Hypothesis XI. Similarly, no differences are expected in perceptions of ethnic or racial stimuli (e.g. Pakeha and Maori).

Hypothesis XII. Political attitudes will not differ substantially between the two systems when measured by one stimulus item.

In the same fashion that it was suggested that familiarity with juvenile offending would influence perceptions, the experiences of some young persons in the population were likely to affect the overall responses of their role-groups. Research evidence has established a link between the perception of self-image, family relations and authority and a career of delinquency (Roberts, 1972). It seemed probable that those dealing with delinquents and those perceiving themselves labelled as delinquents (Justice Department, 1975) would be influenced by that phenomenon.

Hypothesis XIII. The self-image of young persons in the care of the State (as expressed by their responses to the stimulus item I-Myself) will be less positive than that of their counterparts in the non-State system.

Hypothesis XIV. Perceptions of authority figures (e.g. Housemaster, Social Worker and Teacher) and law enforcement roles (Magistrate, Policeman) will be a function of exposure to and experiences of such relationships. State system young persons will exhibit less positive perceptions in those areas than will their equivalent role-group.

Much more data was obtained than could be adequately specified in the initial construction of hypotheses. Although the broad directions were indicated it was necessary to allow the finer analysis of results to point-up other areas in which the population, the two systems and the role-groups interacted within their system-matrices.

CHAPTER V  
EXPERIMENTAL PROCEDURES AND  
FIELD WORK

This chapter describes the elements of the survey made as Project RCC<sup>1</sup>. The first section deals with the way in which the population was identified and contacted. The second section discusses the survey instrument, its construction and its applications. The method of data collection is dealt with next, and, in the final section, data treatment and analysis are outlined.

In brief, a two-stage postal survey was conducted. In the first stage, children's homes and the agencies responsible for them were asked to participate and to give their numbers of potential respondents for the second stage. The total of those numbers represented the population. An instrument was tested and finalized in the form of a survey booklet. The second stage was the circulation, completion and return of survey booklets. The survey obtained basic characteristics about the respondents as a form of census and judgments about some roles and objects central to residential child care.

The Population

The primary task was to identify, locate, ascertain numbers and gain co-operation from the people in the population. That was previously defined [in Chapter IV] as certain adults working in all the State and non-State children's homes and all children over thirteen years of age living in those homes. An outline of the project was supplied in advance to three nationally organized agencies which gave their support and goodwill. The Director-General of the Department of Social Welfare gave permission to approach departmental staff and children in the

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1. Throughout the project all communications, including the returned survey booklets, were addressed from "Project RCC, care of the Education Department, Massey University". It was hoped that address would imply impartiality and a degree of research expertise.

care of the State <sup>2</sup> [Appendix J]. The Director-General of Education, through the Chief Psychologist, agreed to an approach to psychologists. The Territorial Headquarters of the Salvation Army approved access to their offices and homes. All three agencies circularized their offices to that effect. A blanket approach to other non-State agencies was not feasible because of their regional nature, and the initial circular to all organizations was for some the first announcement of the project.

The organizations containing the population were identified from three sources :

- (i) The directory of Registered Children's Homes maintained by the Department of Social Welfare (for the Statutory Managers and resident heads of non-State homes).
- (ii) The internal directory of the Department of Social Welfare (for all State institutions and district offices).
- (iii) The Department of Education 1974 directory of special education and guidance services (for the Psychological Service offices).

The unpredictable movement of people, particularly young persons, through and between agencies made it desirable that the survey responses be made at the same time to avoid including the same persons twice. The device of Census Day was adopted and the date of 17 September, 1975, was set. Seven weeks prior to Census Day, a form letter outlining the project and seeking co-operation was mailed to a list of key personnel compiled from the three directories. A copy of that letter appears as Appendix A. It stated the auspices, nature and limits of the project, and asked for help in obtaining respondents. The general approval of the Director-General of Social Welfare and the fact of optional participation was

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2. Consent to release the directory of statutory managers and names and addresses of non-State registered children's homes held solely by the Department of Social Welfare was obtained at the same time. That directory is not a public document.

mentioned together with an assurance of confidentiality. The reason for Census Day was also given.

With every letter sent there were two types of enclosure ; two copies of a reply form, and a notice to staff. Each is explained in turn. The Reply Form [Appendix B] served three functions. First, it carried specific information about the survey. Second, it asked for the number of potential respondents according to the categories shown. Third, it asked for someone to be named as local agent to receive, distribute, and in the case of homes, administer the survey booklets. The extra copy of that form was for informants to keep for their records. The Notice to Staff [Appendix C] was supplied for use on notice-boards or for circulation. It outlined the project and made an appeal for total participation.

An additional memorandum [Appendix D], enclosed only with the initial letter to all resident heads of children's homes, elaborated two specific suggestions. Firstly, that where a school was attached it was suggested that the senior teacher should administer the survey booklet to children, and might act as agent for the whole institution. Secondly, with regard to estimating in advance the number of children in residence on Census Day, heads were instructed to over-estimate if some uncertainty existed.

The reply forms returned were made-up into five files : Department of Social Welfare district offices ; non-State agencies ; Department of Social Welfare institutions ; non-State institutions ; psychologists. Those files provided both the mailing addresses and the numbers of potential respondents and the means for checking response rates. Given that information on numbers of staff and children was available in some of the original sources, the figures given in the replies were checked for obvious over or under representation.

Sampling Technique : Strictly speaking, no sampling techniques were used. The number of potential respondents from the

population was largely self-selected and might be described as a sample of convenience. While the intention was that all persons in the population should be included, the method used to reach them had some features which influenced that aim. This can be best explained by reviewing the two steps involved and their possible outcomes.

- [1] The first step, to obtain numbers of potential respondents from the local heads of all organizations containing the population, held three possible outcomes :
  - [i] The correct number of respondents was supplied ;
  - [ii] An incorrect number was supplied ;
  - [iii] Participation was declined and the number of potential respondents was not supplied.
- [2] The second step was the completion of survey booklets which were distributed in the quantities requested. Two major possible outcomes controlled the number of those booklets returned :
  - [i] Only some of those people counted as meeting the population criteria in each place returned booklets because ;
    - [a] people had left the organization before Census Day , [b] others had joined in the interval and [c] some persons expected to participate refused to do so or were overlooked.
  - [ii] All persons meeting the population criteria individually returned survey booklets.

The final sample consisted of the number of people in the total population less the unknown number of non-respondents. That sample was felt to be adequate for the purposes of the study ; its size and composition are shown in the chapter dealing with results.

#### The Instrument

This section describes the format of the survey instrument, the rationale behind the measurement device used and the way in which the instrument was constructed and tested.

All respondents were asked to complete the same type of survey instrument which was in the form of a booklet of 21 leaves. The contents of the booklet appears as Appendix I. It was in three sections : first, on the cover, a statement of purpose followed by questions about location, name of agency, respondent's position, gender, year of birth, ethnic origin and the number of years associated with child care; second, instructions for completing the booklet ; third, the eighteen items, one to each page, to be judged.

The Semantic Differential. This is a form of measurement for perceptual judgments made about persons and objects [Osgood, Suci and Tannenbaum, 1955]. Because the general utility of this device to ascertain both denotative and connotative meanings of stimulus words has been widely tested [Warr and Knapper, 1967] it was adopted for this study. It is a technique by which many different measures can be obtained depending upon the use made of it, but commonly it is used to specify differences between concepts in terms of their meaning. For example, it has been used to measure perceptions of social work concepts by groups of students [Jehu, 1970], institutionalized children's perceptions of their families [Kaufman, 1971] and their perceptions of the concept of God [Price, 1971].

Typically, the semantic differential has been used in the form of a set of scales listed down a single page with the stimulus item [sometimes called the key words] to be judged shown at the top. The separate scales comprise a number of response intervals bounded by two bi-polar adjectives. To illustrate this, the completed page used as the example in the survey instrument of Project RCC is shown here as Figure 11.

## EXAMPLE

## F A R M E R

GOOD	___	:	___	:	X	:	___	:	___	:	___	:	___	BAD
WEAK	___	:	___	:	___	:	___	:	___	:	___	:	X	STRONG
FAST	___	:	___	:	___	:	___	:	X	:	___	:	___	SLOW
WISE	___	:	X	:	___	:	___	:	___	:	___	:	___	FOOLISH
MALE	X	:	___	:	___	:	___	:	___	:	___	:	___	FEMALE
YOUNG	___	:	___	:	___	:	___	:	X	:	___	:	___	OLD
SWEET	___	:	___	:	___	:	X	:	___	:	___	:	___	SOUR
COLD	___	:	___	:	___	:	___	:	X	:	___	:	___	WARM
POOR	___	:	___	:	___	:	___	:	X	:	___	:	___	RICH
PASSIVE	___	:	___	:	___	:	___	:	___	:	___	:	X	ACTIVE
DIRTY	___	:	___	:	X	:	___	:	___	:	___	:	___	CLEAN
SOFT	___	:	___	:	___	:	___	:	___	:	X	:	___	HARD
NICE	___	:	___	:	X	:	___	:	___	:	___	:	___	AWFUL
LARGE	X	:	___	:	___	:	___	:	___	:	___	:	___	SMALL

FIGURE 11

Completed Example of the Semantic Differential  
Form used in the Instructions of the  
Project RCC Survey Instrument

Semantic differential instruments have been constructed in many combinations and permutations ; with one through to many stimulus items, with a few through to many bi-polar scales and with even or uneven numbers of response alternatives of varying length. Generally, however, instructions for responding have followed the common pattern that only one mark is made on each scale to indicate a relationship to one of the bi-polar adjectives ranging from closely related to slightly related to the stimulus item. In the case of scales with an uneven number of response alternatives, the mid-point has been available for judgments that the adjectives are equally related or completely unrelated to the stimulus item.

Much previous work with the semantic differential, in which factor-analytic studies have predominated, has attempted to ascertain correlations between responses to different scales [Snider and Osgood, 1969]. The practical value of this approach was that if a limited number of independent factors could be shown to account for responses to a wide range of concepts, then only those factors would need to be measured in later experiments. The outcome of these studies, in which respondents have given judgments of a large number of concepts over a large number of scales, have been steadily consistent. Repeatedly, three major factors have appeared to account for the interrelationship between scales. Moreover,

" . . . these three factors emerge in roughly the same order of magnitude from most analysis. They are usually termed the Evaluative, Potency and Activity factors. The Evaluative factor regularly appears first and accounts for up to three-quarters of the extractable variance. It appears that the most important component of the reaction to a concept is a general like-or-dislike , pro-or-con , approach-or-avoid response. Examples of scales which are usually found to have a high loading on the Evaluative factor are good-bad , beautiful-ugly , fair-unfair , and honest-dishonest. The second factor to appear in most analyses is a Potency factor which typically accounts for half as much variance as the Evaluative factor. This second factor is concerned with power and related notions like size, weight and toughness. Strong-weak , heavy-light , rugged-delicate , and hard-soft are all scales which normally have a high loading on the Potency factor. The third factor - Activity -

is usually of similar magnitude to the Potency factor, and is exemplified by scales like fast-slow , active-passive , tense-relaxed and excitable-calm . . . It might appear then that if a research worker includes in a semantic differential form scales to represent each of these factors, he may be confident that he will obtain information about the major kinds of responses which people normally make" (Warr and Knapper, 1967, p.64-65).

As well as revealing the relationship between a given concept and the scales used to measure it, values obtained on the semantic differential have also been used to indicate relationships between concepts. The stable characteristics of respondents' perceptual processes dictate that classes (or clusters) of stimulus items are responded to in similar fashion. Therefore, groups of respondents with different characteristics would be expected to respond differently to the same cluster of concepts.

For the purposes of this study, two structural aspects of the semantic differential had to be examined in the literature sources ; the optimum number of response alternatives for each scale and the possibility of contextual effects from the serial ordering of the scales and the stimulus items. The evidence from previous studies weighted heavily in favour of using scales with an uneven number of response alternatives, and, for that population of this study , seven units appeared desirable. Although scales with an even number of units have been used (Friedman and Gladden, 1964) the absence of a neutral point equidistant between the polar terms has meant that respondents avoided making judgments when they felt they could not do so. The choice of seven units was reinforced by early experiences in research which reported that fewer divisions irritated respondents and longer scales adversely affected the distribution of responses (Osgood et al, 1957). Moreover, seven unit scales have been claimed to be optimal for use with young persons (Maltz, 1963). On the whole, experiments have shown that neither the order in which the scales are presented nor the ordering of the stimulus items

influence the way in which they are responded to [Warr and Knapper, 1967, p.112].

The Pilot Instrument. Building the semantic differential used in the survey required choices about two main elements ; the stimulus items and the bi-polar adjectives forming the scales. The numbers of each element used was decided arbitrarily but in accord with trends observed in previously reported studies. With the informal assistance of three colleagues experienced in residential child care, the author chose eighteen stimulus items apparently representing a spread of concepts and terms familiar and meaningful to the population to be surveyed. Fourteen pairs of bi-polar adjectives were chosen from the Semantic Atlas prepared by Snider and Osgood [1969]. These were taken in the ratio of six pairs high on the Evaluative factor, and four pairs each from those shown to be high on Potency and Activity factors respectively. Questions about respondent's characteristics were prepared and a set of instructions were adapted from a previously validated instrument. [Jehu, 1970]. All these elements were combined in a test instrument similar to that in Appendix I.

This instrument was administered as a pilot test to 24 persons in three groups of eight. None of the subjects was to be included in the population survey. The first group, Group H [for housemothers] comprised 8 young women [mean age 23 years] drawn from diverse child-caring institutions. While several of the institutions in which those women were employed were to be later represented in the population, they were themselves to be excluded. The second group, Group I [for Intellectually Handicapped Children's Society] comprised older women [mean age 46] employed in I.H.C. hostels which were to be excluded from the survey. The third group, Group C [for children] comprised young male State Wards [mean age 15 years] from a pre-discharge group in a Department of Social Welfare training centre who were due to leave residential care before Census Day. The instrument was administered to those groups separately with a minimum of prior explanation and with instructions similar to those shown in the Group Administration Instructions. [Appendix G].

Because of the large number of variables involved only one third of responses were analysed to test if the semantic differential scales discriminated between the three groups.

Each of the fourteen scales for six stimulus items was treated separately by group to obtain a group mean score. By weighting the scores so that the three intervals closest to the positive polar term in each scale were scored 7, 6 and 5, those closest to the negative were scored 1, - 2, and - 3, and the middle interval scored zero differences between groups would be accentuated for the purposes of the pilot test. The sum of weighted responses in each scale for each group became the group mean value for that scale. Scale values were summed first into factor totals. That is, the six scales which were known to represent the evaluative factor were treated separately as were the four scales each for potency and activity. That step was important to overcome the problem raised by the generalised score in which it has been shown that different profiles can give the same value [Warr and Knapper, 1967]. For example :

	<u>Evaluative</u>	<u>Potency</u>	<u>Activity</u>	<u>Group Value</u>
Group 1	52	-2	20	70
2	20	0	50	70
3	24	16	30	70

From the figures in Table II it was possible to see not only that there was discrimination between groups but that the trends of each profile were reflected in the group mean value.

The pilot trials appeared to confirm the utility of the instrument for the task it was expected to do. The test instrument was adopted, without modification, as a base for the final forms. It should be noted that the form of manual tabulation used for the pilot test was not suitable for computer application of later results. Further findings from the pilot trials appear in the discussion on validity.

Pre-survey Validity of the Instrument: Pre-survey validity was inferred from two areas; responses and reactions to the

TABLE II  
 Analysis of Factor Values From  
 Responses to Six Stimulus  
 Items in Pilot test

Stimulus Items	Factor Sub-totals			Group Mean Values
	Evaluative	Potency	Activity	
[1]	[2]	[3]	[4]	[5]
1. <u>Magistrate</u>				
Group H	57	62	9	128
I	52	52	3	107
C	-12	21	-9	0
2. <u>Housemaster</u>				
Group H	62	45	29	136
I	16	35	11	62
C	68	47	39	154
3. <u>Teacher</u>				
Group H	62	10	26	98
I	66	23	58	147
C	59	10	29	98
4. <u>Welfare home for boys and girls</u>				
Group H	44	-5	35	74
I	29	22	31	82
C	14	23	16	53
5. <u>Mother</u>				
Group H	83	-34	36	85
I	75	-29	46	92
C	85	-35	33	83
6. <u>Delinquent</u>				
Group H	-21	14	32	25
I	-82	-9	4	-87
C	-15	14	28	27

test instrument in the pilot trials and the general literature on the semantic differential. Post-survey validity measures are dealt with later. The pilot trials confirmed the belief that '..... subjects take to it very readily and that it is thought to be a reasonable and attractive instrument...'  
[Warr and Knapper, 1967, p.89].

Although technically face validity has not been considered as a true measure of validity it seemed important in this instance. Since all respondents were going to be asked to complete the same instrument, it had not only to be meaningful but also to appear purposeful to respondents ranging in age from 13 to 65 years plus, and in role-groups from those lowest to highest in responsibility and prestige.

All three groups were given the opportunity to discuss the rationale behind the project and to comment upon the instrument. In general, there was acceptance of the task as reasonable and comprehensible. In particular, pilot group C, boys in care, pointed out an emotional satisfaction in venting aggressive feelings against stimulus items for which they held negative connotations. They slashed at the forms with their pencils.

On the question of content validity, the three pilot trial groups seemed satisfied that the stimulus items chosen by the panel were representative of the areas selected for study. None of the pilot trial respondents admitted to comprehension difficulties for either the stimulus items or the bi-polar adjectives. With one exception, the word passive, all adjectives used were listed in a spelling list standardised for New Zealand at about the 10 year old level [Arvidson, 1968].

On the question of response validity, the pilot trials did point-up the problem of the hostile, dissembling or disaffected respondent <sup>3</sup>. One respondent in group H displayed her

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3. A strategy for identifying patterned responses is outlined in the section on data analysis.

unwillingness to discriminate over some stimulus items by making completely neutral responses to those scales <sup>4</sup>.

Reliability: Reported correlations for stability of response over time and for internal consistency of semantic differential instruments have been high. Similar results were reported for between-forms reliability [Warr and Knapper, 1967, p.77-85]. No attempt was made to measure reliability factors of the instrument constructed for this study. A post-survey reliability measure was built in by creating two forms of the instrument on the split-half method.

The order of the stimulus items for the two forms is shown below:

<u>Form 1</u>	<u>Form 2</u>
Teacher	Prime Minister
Delinquent	Policeman
Welfare home for boys or girls	Friend
Mother	Social worker
Magistrate	Pakeha
Housemaster	A poor person
Father	Maori
I-myself	Church
Orphanage	State Ward
Prime Minister	Teacher
Policeman	Delinquent
Friend	Welfare home for boys or girls
Social worker	Mother
Pakeha	Magistrate
A poor person	Housemaster
Maori	Father
Church	I-myself
State Ward	Orphanage

Half the total number of booklets were of each form. These were alternated before the booklets and their envelopes were

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4. It transpired that the respondent's objection was based on the demand that she discriminate on the stimulus items Maori and pakeha. This was, in fact, an omen of events to come.

numbered. Each organization was allocated a sequence of numbers so that each received equal proportions of each form of the instrument.

Values of the Semantic Differential Scales. The semantic differential was employed to measure meaning in terms of the combined attributive, affective and expectancy responses of the population towards the stimulus items. As the respondents were told, there could be no "right" or "wrong" responses as such, and instead of scores, the concepts of values and weightings were most appropriate.

For ease of analysis, particularly computer-assisted analysis to which the semantic differential is well suited, each unit on the scale was rated from 1 to 7.<sup>5</sup> Again the values assigned had no meaning in themselves until an interpretation was derived from them. In this case, it was decided that the highest value would be weighted towards the so-called positive term in each pair of bi-polar adjectives. This gave a consistency of values across all scales so that separate scales and scale profiles could be compared one with the other [the values assigned are shown in Appendix L].

This procedure was varied with the items Mother and I-myself. Male had been chosen as the high value adjective but this was reversed for the stimulus word Mother. Similarly, values for this scale were reversed for responses to I-myself when the respondent had reported herself on the cover sheet as female.

#### Data Collection

Distribution and Return of Survey Booklets. The survey preliminaries had secured participation from individuals or from those in authority consenting for others. Booklets were stamped with identification numbers ranging from 0001 to 1300 and put into envelopes bearing the same identification number.

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5. The departure from the earlier system used in the pilot trials was simply because the computer could not deal with positive and negative dimensions in the one operation.

The envelopes had postage stamps affixed and were addressed for return to Project RCC. The identification numbers of the booklets issued were recorded and checked against those returned. It was noted whether the booklet was returned uncompleted, incomplete or marked invalid by an administrator.

Administration: Data were collected by a mixture of self-administered and group-administered techniques. Persons in the former category were all adults. The latter category, group administration, contained some adults and all young persons in care eligible and willing to participate. Booklets were distributed with a standard covering letter (Appendix F). That letter thanked the addressees for their participation, stated the number of booklets they had requested and reminded them of the date of Census Day.

Instructions for group administration were prepared (Appendix G) and a set was included in all bulk postings of booklets. This sheet was in two sections, general preparations and specific administration of the task.

To assist leaders, a set of Standardised Responses for Survey Form Items was supplied which they could refer to if necessary. That sheet is shown as Appendix H. To assist with a response validity check, leaders were sent a confidential note which asked them to mark booklets where the respondent's lack of comprehension or motivation made their responses invalid.

### Data Analysis

Coding of Data : All material on the booklets was reduced to numerical values in preparation for transposition to computer data cards. A coding manual (Appendix K) was prepared showing the array of responses in relation to the columns of the four cards which were to carry the data, and the substitution values for all responses.

The booklets had been designed so that coded values (shown in Appendix L) could be marked directly on them.

Once all booklets were coded, a fresh number, the case identification number, was issued to each one. This procedure was necessary because of the gaps in the sequence of the distribution identification numbers caused when booklets were returned unused, invalid or not returned at all. A total of 1,041 booklets were transposed to punched cards giving an initial data file of 4,164 cards.

Patterned and Invalid Responses : It was observed in the pilot trials and anticipated in the survey that a frank indicator of the failure of some respondents to attempt discrimination on the semantic differential scales would be the marking of a uniform pattern on all scales relating to any one stimulus item. Commonly, respondents used the middle response alternative, weighted as value 4, on all scales, to show that they would not choose between the alternatives for particular stimulus items. Such responses, a series of marks down the exact middle of the scales, were given the value 8, and labelled Median responses, where twelve or more of the scales were so marked. The one or two responses which did discriminate were accorded the standard values.

Similarly, responses might be made in a uniform line down the fourteen scales on other than the median point. Twelve or more scales so marked were deemed to be invalid and were given the value 9 and the label Uniform responses. Other invalid responses, such as two or more crosses on the one scale were coded as Zero responses with value 0. Those substitute values allowed frequencies of invalid, patterned or zero value responses to be identified and rejected at certain levels.

The 'Lie Scale' : The problem of haphazard or reversed responses had also to be accounted for. A measure of the validity of responses was devised by investigating, in each case in the initial data file, responses to the five key

variables listed below :

<u>Variable number</u>	consisting of	<u>Stimulus Item</u>	and	<u>Scale</u>
047		Mother		male - female
089		Father		male - female
103		I-myself		male - female
131		Prime Minister		
		[Mr W.E. Rowling]		male - female
205		A Poor Person		rich - poor

An incongruity measure was applied to those variables. Where in the first four scales measuring gender, the stimulus item had been judged to be other than would be expected, for example, if Mother was judged more male than female or equidistant (values 1,2,3, or 4) , then such responses were scored 1 on the Lie Scale. With the stimulus item A Poor Person, responses on the rich - poor scale which rated from the mid-point to the rich end (values 4,5,6, or 7) were similarly scored 1 on the Lie Scale.

To be consistent with the claim that there can be no 'right' or 'wrong' answers on the semantic differential, the rationale was adopted that a score of three or more incongruous responses would cast doubt on the validity of that case and that the total record should be excluded.

Identification of Invalid Cases : The first computer sub-programme applied to the initial data file was designed to identify all invalid and suspect case records. This sub-programme listed for all cases Lie Scale values as well as reject indication values for the seven combinations of Median, Uniform and Zero responses. Those values related to any of the following combinations where the total for each case was equal to or greater than 200 out of the possible total of 252 responses.

1. Median responses , value 8.
2. Uniform responses , value 9
3. Zero responses , value 0
4. The sum of the number of Median and Uniform responses.
5. The sum of the number of Median, Uniform and Zero responses.
6. The sum of the number of Uniform and Zero responses.
7. The sum of the number of Median and Zero responses.

The computer print-out was checked visually and case records for all cases showing a reject score of any value other than nil, or those showing any value of 3 or more on the Lie Scale were removed from the initial data file. [Those records were assigned to a special sub-file number 20, labelled Ghosts, which was not included in any further analysis.]

Computer Analysis : 927 complete case records remained. For the initial computer work, the Statistical Package for the Social Sciences [Nie, Bent and Hull, 1970] programme was used on a B6700 computer. Sub-programme Dump provided a print-out of all information recorded on the data file. This print-out was used to sort the cases manually into the 19 sub-files corresponding to the variable Role. Those sub-files made-up the final data file which was treated first by the sub-programmes Codebook and Fastabs. It was found, however, that the distribution of responses showed such marked variations that total reliance on parametric type analysis would be misleading. For that reason, the data were analysed again using a multiple analysis of variance programme, Manova [Gregson and Davis, 1976].

## CHAPTER VI

### RESULTS

This chapter, which is in two main parts, presents the outcome of the fieldwork of Project RCC. The first part sets out the analysis of the data and the second part discusses those findings. The initial sections consider the census component of the study. In particular, the degree of representativeness of the sampling attained and some basic characteristics of the population are examined, and the hypotheses relating to those elements are discussed. The next section looks at the reliability and validity of the survey instrument. The last sections of part one cover the perceptual measurements arising from the semantic differential instrument, offer evidence to test the hypotheses about perceptual process [hypotheses VI to XIV] and tabulate data which helps to compare the two systems of residential child care. Following that, an interpretation of the findings concludes this chapter.

#### Sampling and Response Rates

This section considers whether the attempts to reach the research population were successful and whether the response rates obtained were adequate for the purpose of the study.<sup>1</sup> The problems of identifying individuals and ensuring coverage of the population have already been dealt with in Chapter V.

Two measures were used to assess response rates, broadly equivalent to stages one and two of the survey respectively. The first monitored the participation of agencies which were the key to supplying numbers of respondents for the second stage. The second measure was the response rates of individuals based on expected and observed frequencies. Overall agency participation, from the time they were

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1. To avoid the possible inference that non-participation could be equated with non-co-operation, agencies are not named individually.

approached to the receipt of responses of their constituents, is shown in Table III. Of 137 agencies approached, 123 replied before Census Day. Ten agencies did not respond either to the initial letter [Appendix A] or to the follow-up [Appendix E]. Fourteen agencies either declined to participate or claimed that they did not meet the criteria outlined. Four agencies replied too late to be included in the survey. By Census Day, 109 agencies had promised that their personnel would participate ; fifteen failed to keep that promise through returning all survey booklets unused [four] or by simply failing to return any booklets [eleven]. In the end, booklets were returned from individuals representing 94 agencies.

The best coverage was obtained from the State sector, with returns from 36 places out of a total of 38. In the non-State sector, seventeen out of 31 offices and 30 out of 46 homes participated. Half of all Psychological Service Offices [eleven in all] responded. However, these proportions need to be considered in relation to the figures for expected and actual participation. All State offices and institutions which had promised to participate did so. For the non-State sector, offices dropped from 23 to 17 and institutions from 32 to 30 places. The number of offices of the Psychological Services fell from eighteen to eleven places.

Moving from agency response to individual responses, these are tabulated in Table IV. Based on the numbers given by agencies, a total of 1,238 booklets were circulated to State [931] and non-State [307] places. Unused booklets returned amounted to 101, 176 were not returned and 961 were returned partially or fully completed. Included in this total were 34 invalid booklets which reduced the final data file to 927 cases.

Apart from the fifteen places which did not participate as promised, there was no way to tell accurately the meaning of the shortfall in the estimated total number by 277 booklets. This problem was compounded by the fact that agencies had

TABLE III

Participation of Agencies from Initial  
Approach to Final Responses

Event	Number of Agencies					Totals
	Non-State Offices	Non-State Institutions	State Offices	State Institutions	Psychological Services Offices	
[1]	[2]	[3]	[4]	[5]	[6]	
Initially Approached	31	46	17	21	22	137
No response	5	3	1	-	1	10
Replied Before Census Day	26	40	16	20	21	123
Declined or did not meet criteria	3	8	-	-	3	14
Replied too late	-	3	-	1	-	4
Expected to participate	23	32	16	20	18	109
Did not participate	6	2	-	-	7	15
Participated	17	30	16	20	11	94

TABLE IV

Estimated and Final Sample Numbers  
 Calculated from Distribution and  
 Return of Survey Booklets

Action	Booklet Numbers		
	State	Non-State	Total
[1]	[2]	[3]	[4]
Supplied as requested	931	307	1,238
Returned Unused	-	-	101
Not Returned	-	-	176
Total Returned	736	225	961
Returned Invalid	25	9	34
Total Included in Analysis	711	216	927

TABLE V

Estimates of Numbers of Potential Respondents  
Within Non-Responding Agencies

Agency/Sector	Numbers		
	Non-Responding Agencies <sup>a</sup>	Average Response Per Sector	Totals
[1]	[2]	[3]	[4]
Non-State Offices	7	3	21
Non-State Institutions	10	7	70
State Offices	1	3	3
State Institutions	1	3 <sup>b</sup>	3
Psychological Service	1	2.5	2
Estimated Total			99

<sup>a</sup> Excludes agencies who supplied respondent numbers but later declined

<sup>b</sup> Actual number for that institution

been told to over-estimate numbers when there was the possibility of roll fluctuations. The best solution was to estimate the number of potential respondents hidden within the agencies which neither participated nor supplied respondent numbers. There was no way of telling exactly why agencies declined. If, however, it is assumed that half of the agencies which declined to participate really did not meet population criteria, some estimations can be based on the 20 agencies which did not supply respondent numbers.

In Table V the average number of respondents in each sector was calculated and multiplied by the number of non-responding agencies. On that basis, an estimated 99 potential respondents had been excluded. Adding that number to the initial estimate of 1,238, the outer limit of the population would seem to have been approximately 1,340 persons. Allowing for a generous ten per cent over-estimation by agencies, the lower limit for the population was judged to be around 1,200 persons of which 961 or 80% were reached in the survey. It seemed reasonable to consider that sample highly representative of the population and to dispense with statistical techniques applicable only to sampling analysis.

#### Census Data : A Description of the Two Systems.

A belief that the two systems of residential child care would not differ markedly from each other in certain basic features of their set-up and constituents was proposed in hypothesis 1 to V inclusive. This section examines those features and the evidence for accepting or rejecting those hypotheses.

Hypothesis I suggested that State and non-State equivalent role-groups would be comparably distributed in geographic location. Table VI sets out the actual frequency distribution found by Region and Role-group. While there were clear differences between some cells of that table, the array was too large and the cell numbers too disparate to obtain any overall significant difference. Those differences disappeared when the total numbers for the two systems were compared for the North and South Island respectively. Thus, the hypothesis was confirmed.

TABLE VI

Distribution of the Population by Region and by  
Role-Groups with Sub-totals for  
North and South Islands

Region	Role-groups											
	Dirate	Dirnon	Socate	Soonon	Prirate	Prinon	Houate	Hounon	Ancate	Ancnon	Vipate	Vipnon
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Whangarei	-	-	-	-	-	-	-	-	-	-	-	-
North Shore/ Auckland	-	1	1	-	-	-	-	2	-	3	-	-
Auckland	-	1	1	4	6	1	7	4	-	1	2	-
South Auckland	1	1	14	-	2	1	10	2	1	6	-	-
Hamilton	1	1	3	-	3	1	9	1	4	1	-	-
Rotorua	-	-	-	-	-	-	-	-	-	-	-	-
New Plymouth	-	-	-	-	-	-	-	-	-	-	-	-
Wanganui	1	-	2	-	2	-	2	1	-	-	-	-
Palmerston North	-	-	2	-	4	-	17	1	2	1	1	-
Gisborne	-	-	-	-	-	-	-	1	-	-	-	-
Hastings	1	2	2	-	-	2	-	4	-	1	-	-
Wairarape	-	2	2	1	2	3	1	7	-	4	1	-
Lower Hutt	1	-	4	-	1	-	7	1	3	-	-	-
Wellington	1	1	1	-	1	2	4	2	-	2	-	2
North Island Sub-Total	6	9	32	5	19	10	57	26	10	18	4	2
Nelson	1	-	1	-	-	-	-	-	-	-	-	-
Christchurch	-	3	3	5	4	-	31	3	1	2	1	-
Timaru	2	1	-	1	-	2	-	2	1	2	1	1
Dunedin	1	1	5	2	2	-	5	2	-	2	-	-
Southland	-	-	-	-	-	1	-	2	-	3	-	-
South Island Sub-Total	4	5	9	8	6	3	36	9	2	9	2	1
Totals	10	14	41	13	27	13	93	35	12	27	6	3

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 Role-groups
 

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	Teacher	Tecnon	Yogate	Yognon	Psycho	Matate	Matnon	State Total	Non-State Total	Total
	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]
Whangarei	-	-	-	-	3	-	-	3	-	3
North Shore/ Auckland	-	1	-	9	-	-	1	1	17	18
Auckland	6	1	67	4	2	5	4	96	19	115
South Auckland	5	-	25	7	-	2	1	60	18	78
Hamilton	2	-	30	16	2	3	1	57	21	78
Rotorua	-	-	-	-	2	-	-	2	-	2
New Plymouth	-	-	-	-	2	-	-	2	-	2
Wanganui	4	-	10	1	-	-	1	21	3	24
Palmerston North	12	-	130	-	3	2	0	173	2	175
Gisborne	-	-	-	-	-	-	1	-	2	2
Hastings	-	-	1	7	-	-	-	4	16	20
Wairarapa	2	-	29	10	-	1	2	38	29	67
Lower Hutt	1	-	26	2	4	1	2	48	5	53
Wellington	-	-	6	17	2	0	2	15	28	43
North Island Sub-Total	32	2	324	73	20	14	15	520	160	680
Nelson	-	-	-	-	1	-	-	3	-	3
Christchurch	15	-	73	4	4	6	3	138	20	158
Timaru	-	-	-	-	-	-	5	4	14	18
Dunedin	-	-	28	4	1	2	0	44	11	55
Southland	-	-	2	3	-	-	2	2	11	13
South Island Sub-Total	15	-	103	11	6	8	10	191	56	247
Totals	47	2	427	84	26	22	25	711	216	927

Hypothesis II claimed that male and female proportions would be constant when equivalent role-groups were compared. The supporting data are shown as Table VII. Again, no significant differences were discovered between equivalent role-groups. The hypothesis was confirmed.

Data on sex numbers did point-up, however, a trend to male dominance in senior positions among staff respondents. In the State system, Directors and Principals were almost exclusively males and there was only slight female representation in those categories in the non-State groups. At the middle level of responsibility, housestaff, males were proportionate to females in relation to the sexes of the young persons in care in the State sector but not in the non-State sector ( $X^2 = 5.14$  ;  $df = 2$  ; not significant), where twice as many females as males cared for almost equal numbers of boys and girls.

Hypothesis III was concerned with possible age differences : the frequency distribution of the population by Age and by Role-group is displayed in Table VIII. This array, which produced no significant differences, was further broken-down in Table XI into a match of the six most pertinent role-groups for both State and non-State systems. This tended to emphasise the similarity of the two systems on this variable. No significant differences were found between the mean ages of the matched groups and the hypothesis was upheld. Nonetheless, some interesting trends were revealed by the "Range" figures (column 6) of Table XIX. In the first match of State and non-State directors (Dirate and Dirnon), the State people with an age range of 15 years around a mean of 51 were found to be more closely age-related than their counterparts. Ages of non-State directors, on the other hand, had a range of 27 years around a mean age of 49. Those features were reversed for the social worker role-groups where the State social workers (Socate) showed a greater age dispersion than their counterparts (Socnon).

TABLE VII

Distribution of the Population by Sex  
and by Role-Groups

Role-Groups	Male	Female	Total
[ 1 ]	[ 2 ]	[ 3 ]	[ 4 ]
Dirate	10	-	10
Dirnon	12	2	14
Socate	20	21	41
Sochon	6	7	13
Priate	21	6	27
Prinon	10	3	13
Houate	49	44	93
Hounon	11	24	35
Ancate	1	11	12
Anchon	3	24	27
Vipate	2	4	6
Vipnon	2	1	3
Tecate	27	20	47
Teconon	-	2	2
Yogate	236	191	427
Yognon	43	41	84
Psycho	26	-	26
Matate	1	21	22
Matnon	-	25	25
Total	480	447	927

TABLE VIII

Distribution of the Population by Age  
and by Role-Group

Role Groups	Age in Years									
	NK	13	14	15	16	17	18	19	20- 24	25- 29
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Dirate										
Dirnon	1									
Socate									4	7
Socnon										1
Priate										1
Prinon										1
Houate								3	16	15
Hounon							1		5	5
Ancate									2	3
Anonon						1	1	4	7	5
Vipate									1	2
Vipnon									1	
Tecate	1								2	7
Yogate	4	64	139	168	49	3				
Yognon	2	17	31	18	9	6	1			
Psycho										1
Matate	2									1
Matnon										1
Total	10	81	170	186	58	10	3	7	38	50

	Age in Years								Total
	30- 34	35- 39	40- 44	45- 49	50- 54	55- 59	60- 64	65- 69	
	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	
Dirate			1	1	6	2			10
Dirnon	1	1	2	2	3	1	3		14
Socate	8	5	4	6	3	3	1		41
Sochon	2	2	3	2	3				13
Priate	7	6	5	3	4	1			27
Prinon	2	4	4	1		1			13
Houate	11	13	5	15	7	5	1		93
Hounon	5	4	6	3	4	2			35
Ancate	1			2	3		1		12
Anchon	8			1					27
Vipate	1				1	1			6
Vipnon	2								3
Tecate	6	5	9	4	10	1	1	1	47
Teconon		1		1					2
Yogate									427
Yognon									84
Psycho	4	7	6	2	6				26
Matate	2	2	1	5	3	4	2		22
Matnon	2	7	6	4	3	2			25
<b>Total</b>	<b>62</b>	<b>57</b>	<b>54</b>	<b>52</b>	<b>56</b>	<b>23</b>	<b>9</b>	<b>1</b>	<b>927</b>

TABLE IX

Comparison of Selected State and Non-State Equivalent  
Role-Groups by Indices of Age Distributions

Role-Groups	Indices of Age Distributions				
	N	Mean	Mode	Standard Deviation	Range
[1]	[2]	[3]	[4]	[5]	[6]
Dirate	10	51.10	53	4.41	15
Dirnon	13	49.46	60	8.88	27
Socate	41	37.85	45	10.62	39
Socnon	13	41.31	42	7.78	26
Priate	27	40.41	33	7.97	29
Prinon	13	40.15	44	8.30	30
Houate	93	36.04	23	11.43	41
Hounon	35	36.51	23	11.29	39
Yogate	423	14.50	15	.910	4
Yognon	82	14.50	14	1.22	5
Matate	20	47.35	55	9.39	32
Matnon	25	42.52	37	7.58	30

Hypothesis IV stated that differences in ethnic origin, or race, would not be observed in the matched role-groups. This hypothesis was rejected on the basis of the large differences which were discovered when housestaff role-groups (Houate with Hounon ;  $p = .01$ ) and the young persons role-groups (Yogate with Yognon ;  $p = .01$ ) were compared on the frequencies observed in Table X. Ten per cent of the total State housestaff were non-European, whereas the non-State sector was fully European. For the young persons, 65%, almost two thirds, of the State group were non-European compared with only 40% of young persons in the non-State group.

Hypothesis V stated that no differences would be observed when the equivalent role-groups of the two systems were compared on the mean number of years members had been associated with child care. In the initial data processing, there seemed to be some ambiguity in the question asked in the survey (Appendix I, cover sheet) as it referred to association with child care rather than to residential child care. Some adult respondents, for example, mainly teachers and psychologists, tended to breakdown into years their work experience related to children. Moreover, some young persons obviously included time spent in other forms of substitute care, such as foster homes. Despite this reservation, it was felt that variance of response arising from the suspected ambiguity would be cancelled-out between matched groups. From the frequency distribution for the whole population (Table XI) six selected role-groups from each system were contrasted as shown in Table XII. Slight differences were observed between most groups and large differences in the contrasts of directors, principals and young persons. State directors (Dirate) and principals (Priate) were shown to have had almost twice as long an association with child care as had their equivalents (Dirnon and Prinon). Those trends were reversed for young persons, as the average period for non-State youngsters (Yognon) was over two and one half times greater than the period for the State group (Yogate).

Thus far, the data revealed more similarities than differences between the two systems. The only differences worth considering

TABLE X

Distribution of the Population by Race  
and by Role-Groups

Role-Groups	Race									Total
	Not Stated	Maori	Maori-Pakeha	Maori - Pacific Islander	Pakeha	Pakeha - Pacific Islander	Pacific Islander	Maori-Other	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Dirate					10					10
Dirnon					14					14
Socate		3	1		37					41
Socnon		2			11					13
Priate		1	1		24				1	27
Prinon					13					13
Houate	1	9	1		82					93
Hounon					35					35
Ancate	1	1			10					12
Anchnon			1		26					27
Vipate					6					6
Vipnon					3					3
Tecate		2	1		44					47
Tecnon					2					2
Yogate	1	237	20	1	148	3	15	2		427
Yognon	1	12	10		49	4	6	2		84
Psycho	1	2			23					26
Matate		2	1		19					22
Matnon		1			24					25
Totals	5	272	36	1	580	7	21	4		927

TABLE XI

Distribution of the Population by Number of Years  
Associated with Child Care and by Role-Groups

Role-Groups	Years Associated with Child Care											Total
	0>1	1>2	2>3	3>5	5-9	10-14	15-19	20-24	25-29	30-34	35-37	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Dirate					1	1	2	1	2	2	1	10
Dirnon		1		4	2	2	1	1	3			14
Socate	1	3	6	4	10	7	3	2	3	1	1	41
Socnon	1	1	3	3	1			2	2			13
Priate				1	8	8	5	2		3		27
Prinon			3	4	1	4	1					13
Houate	15	9	15	15	20	8	8	1	2			93
Hounon	5	2	4	7	8	1	3	4	1			35
Ancate	4	1	3	1	2		1					12
Anchon	7	7	7	3	1	2						27
Vipate			1	1	1							6
Vipnon	1				1	1						3
Tecate	5	5	10	6	10	6	2	2	1			47
Tecnon					2							2
Yogate	193	106	65	47	14	2						427
Yognon	28	11	9	10	20	6						84
Psycho		1		3	5	12	2	1	2			26
Matate			1	2	11	1	3	2	1	1		22
Matnon			2	4	11		5	1			1	25
Totals	260	150	129	115	129	59	37	19	16	10	3	927

TABLE XII

Comparison of Selected State and Non-State Equivalent  
Role-Groups by Distribution Indices  
For Period Associated with  
Child Care

Indices of Distributions for Period of Association					
Role-Groups	N	Mean	Mode	Standard Deviation	Range
[1]	[2]	[3]	[4]	[5]	[6]
Dirate	10	23.30	19	8.80	26
Dirnon	14	13.79	3	11.72	29
Socate	40	10.45	2	9.26	34
Socnon	13	9.27	2	10.60	27
Priate	27	13.37	10	7.9	31
Prinon	13	6.62	4	4.60	14
Houate	93	5.68	2	6.06	29
Hounon	34	7.40	3	7.49	28
Yogate	407	1.43	1	1.47	10
Yognon	73	3.78	1	3.52	14
Matate	22	11.23	7	8.11	28
Matnon	25	10.48	8	8.44	35

further were those for some role-groups in the variables of ethnic origin and the period associated with child care.

#### Reliability and Validity of the Instrument.

Before considering the semantic differential findings of this study it seems advisable to have some indications of the reliability and validity of the instrument. A measure of reliability was built-in to the survey procedure by having two forms, on the split-half method, of the one type of booklet. The population were thus assigned to one of two reliability groups according to the type of booklet they completed. Two measures were derived from a sample of responses numbering 57 variables [variables 140-196]. The first, an analysis of the differences between the responses of the two reliability groups to those variables, using the statistic Chi-square, is shown in tabular form in Table XIII.

Significant differences in responses were observed for six variables and some doubts about internal consistency of the instrument were raised by this finding. The second measure concerned the tendency to fail to respond to apparently emotive items, particularly Pakeha and Maori, where up to one third of the population abstained. Using the data from the reliability groups, it was seen that this tendency was consistent between them, thus ruling-out the possibility that serial effects would be greater for reliability group one, where Pakeha and Maori appeared towards the end of the list of eighteen stimulus items.

On the question of validity, further investigations are required before this can be fully explored. It seemed likely, in view of the relatively high response rate achieved and the low incidence of invalid records, that the instrument had a degree of face validity.

Some evidence of construct validity can be inferred from the analysis of the contribution of the bi-polar scales to the significant variation found within each stimulus item. The correlations [together with significance levels] for each variable arrayed in Table XVI point-up the semantic aspect of

TABLE XIII

Analysis of difference<sup>a</sup> between Responses of Reliability  
Groups One and Two on a Sample  
of Variables

Variable Number	P	Variable Number	P	Variable Number	P
140	.104	159	.321	178	.601
141	.008*	160	.164	179	.364
142	.232	161	.091	180	.390
143	.000*	162	.149	181	.909
144	.015	163	.001*	182	.786
145	.044	164	.032	183	.140
146	.120	165	.086	184	.229
147	.039	166	.000*	185	.265
148	.002*	167	.552	186	.204
149	.013	168	.982	187	.729
150	.338	169	.143	188	.710
151	.247	170	.448	189	.261
152	.647*	171	.207	190	.628
153	.001*	172	.529	191	.411
154	.059	173	.478	192	.268
155	.404	174	.308	193	.004
156	.329	175	.154	194	.487
157	.079	176	.728	195	.570
158	.050	177	.186	196	.788

<sup>a</sup> Statistic Chi-Square with 6 degrees of freedom

\* Denotes statistically significant difference

this instrument. Some scales, particularly weak - strong, consistently accounted for the variance within stimulus items, but all scales accounted for at least some variance over the whole range. In lieu of the customary factor analytic treatment of the semantic differential, this measure indicated some confidence in the instrument<sup>2</sup>.

#### Perceptual Measurements

The outcome of testing the remaining hypotheses is the focus of this section. As a preliminary, further mention is made of the treatment and analysis of the semantic differential data and the way in which those data are organized. Also at this stage, the population was re-defined. It was considered that seven of the role-groups, covering Ancillary Workers [Ancate and Ancnon], Visiting Professionals [Vipate and Vipnon], Teachers [Tecate and Tecnon] and Psychologists [Psycho] were insufficiently well matched by equivalent groups of similar numbers to contribute meaningfully to this investigation. Further analysis and discussion is confined to the remaining twelve role-groups.

Flowing from the multiple analysis of variance applied to the data by the computer programme Manova [Gregson and Davis, 1976] three sets of "master tables" were generated. These comprised

- (i) Means, standard deviations and number of missing observations for each variable cross-tabulated by role-group [Table XV].
- (ii) Correlations between each variable, including sex and age, for each stimulus item and the composite scores of each role-group on those items. Levels of significance for the degree to which each variable contributed to the variance was also computed [Table XVI].

---

2. It had been intended to apply a factor-analysis treatment, in the fashion indicated in Chapter V, to reveal correlations between scales. This was attempted, but without success as the data array was too large for the computer core to handle. A sample of 57 variables only was entered but that also was rejected ; further reductions would have been meaningless.

(iii) Contrast values derived from discriminant function coefficients<sup>3</sup> for each stimulus item calculated first with sex and age as variables and then with sex and age adjusted as covariates [Table XVII].

This material provided the basis for the analysis of similarities and differences between the two systems. Because of the bulkiness of those tables they have been placed in Appendix N. However, to commence the consideration of the outcome of perceptual measurements, a summary table, number XIV is provided in the text. Table XIV shows the number of roots which are significant within the variables encompassed by each stimulus item, and the levels of significance and correlations when the same data is adjusted for sex and age. In all, seven out of the eighteen stimulus items were found to discriminate between the matched role-groups of the two systems, and these findings are now applied to the hypotheses.

Hypotheses VI stated that perceptions are a function of sex roles and that males and females would show different patterns of response. The data overwhelmingly supported this hypothesis which was duly confirmed. The supporting evidence is found in Tables XIV and XVI, where, in all analyses, the sex of respondents consistently accounted for the greatest amount of variance between responses. By looking to the raw data and to the means of largely male or female role-groups in Table XV, it was observed that the direction of this difference was for females to make more positive responses [i.e. accord higher values] than males to stimulus items.

Hypothesis VII suggested that perception was a function of age. This hypothesis was confirmed as younger respondents showed a different pattern to older respondents in their perceptions of stimulus items. Again, the evidence is to be found in

---

3. Discriminant-function analysis is similar to regression analysis except that the criterion used in obtaining the best estimates of the parameters involved is that of minimising the number of misclassifications rather than minimising the sum of the squares of the errors of prediction. Further, a separate discriminant function is required for each criterion group.

TABLE XIV

Tests of Significance for all Stimulus Items using Wilks  
Lambda Criterion and Canonical Correlations (r)  
Shown Without Covariates and with Adjustments  
for Two Covariates (Sex and Age)

Stimulus Items (1)	Without Covariates			Adjusted for Two Covariates		
	No. of Roots Significant (2)	p (3)	r (4)	No. of Roots Significant (5)	p (6)	r (7)
Teacher	2	.001	.882	nil	-	(.253)*
		.001	.348			
Delinquent	2	.001	.883	1	.047	.269
		.001	.353			
Welfare Home	2	.001	.881	nil	-	(.251)*
		.001	.331			
Mother	2	.001	.879	nil	-	(.268)*
		.001	.359			
Magistrate	2	.001	.882	1	.024	.314
		.001	.356			
Housemaster	2	.001	.881	1	.013	.254
		.001	.377			
Father	2	.001	.880	nil	-	(.219)*
		.001	.359			
I-Myself	2	.001	.879	nil	-	(.232)*
		.017	.333			
Orphanage	2	.001	.880	nil	-	(.258)*
		.001	.346			
Prime Minister	2	.001	.883	nil	-	(.258)*
		.028	.334			
Policeman	2	.001	.887	1	.003	.363
		.001	.335			
Friend	2	.001	.893	1	.001	.379
		.003	.325			
Social Worker	2	.001	.885	nil	-	(.291)*
		.012	.341			
Pakeha	2	.001	.880	nil	-	(.229)*
		.049	.356			
Poor Person	2	.001	.880	nil	-	(.236)*
		.001	.347			
Maori	2	.001	.891	1	.003	.358
		.009	.361			
Church	2	.001	.881	nil	-	(.236)*
		.001	.358			
State Ward	2	.001	.884	1	.001	.306
		.001	.359			

\* Denotes highest r value in non-significant roots

Tables XIV and XVI. As with the variable sex, the canonical correlations of age with other variables showed a steady consistency, in this case with an average correlation of around  $r = .350$ . The directions of the differences varied between stimulus items and these can be observed in the contrast values in Table XVII.

The findings on the influence of sex and age confirmed the utility of controlling for these two variables in all analyses.

Hypothesis VIII stated that over-familiarity with the area of juvenile offending would bias perceptions of associated roles and objects. It was suggested that State sector responses would be less positive to the stimulus items Magistrate, Policeman and Delinquent.

This hypothesis is accepted on the basis of the contrast values given for those stimulus items in Table XVII. For a clear picture of how this array looks together, those values are presented graphically in Figure 12.

Hypothesis IX suggested that the Christian commitment of the non-State system would be reflected in their responses to some pertinent stimulus words, namely Church, A Poor Person, and Orphanage. This suggestion could not be supported on the basis of those items which are shown in Table XIV as failing to discriminate between the two systems. Moreover, looking to the two-dimensional contrast values for those stimulus items, unadjusted for sex and age variables, in Table XVII, there is a degree of symmetry between the role-groups of the two systems on almost all variables.

Hypothesis X claimed that there would be no variation between the two systems in the areas of family and social relations, as expressed through the items Mother, Father and Friend. The results suggest that this hypothesis was poorly formulated and that the concepts of family and social relations could not be linked together. Neither of the items Mother and Father discriminated between the two systems but the responses to the

Numbers equal Role-groups  
as shown in Appendix M

□ = State  
○ = Non-State

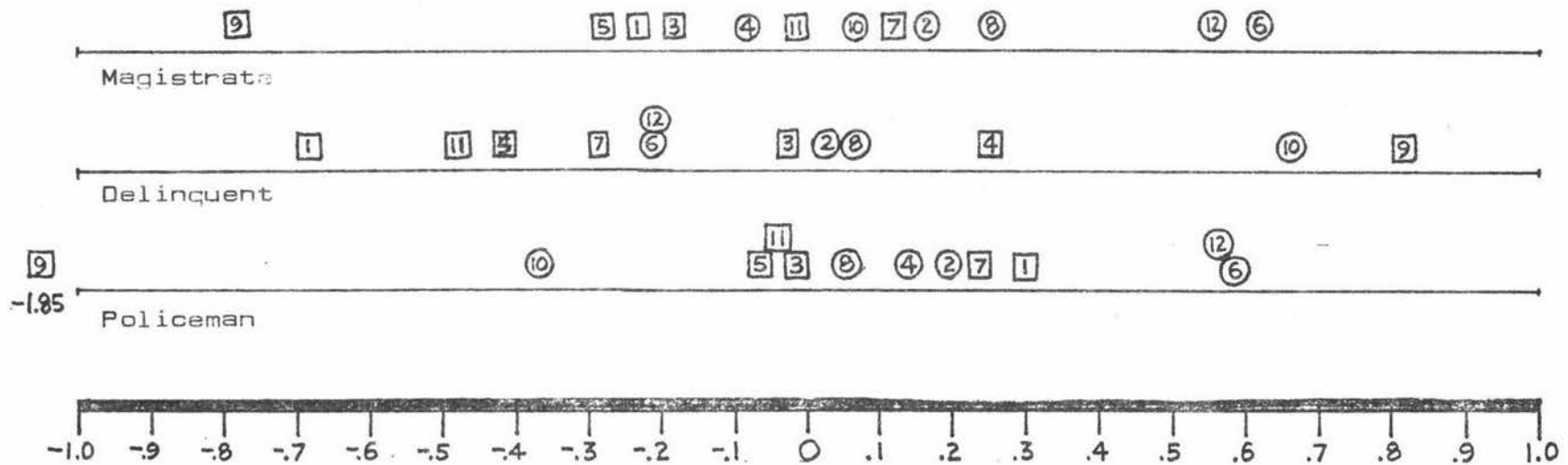


FIGURE 12  
Contrast Values for Role-groups on Three Stimulus Items

item Friend did discriminate. On these results, the hypothesis as it stood had to be rejected, the indications being that perceptions of parental roles did not differ between the two systems. The significance of the responses to Friend appeared to require more investigation.

Hypothesis XI stated that perceptions of ethnic or racial stimuli would not vary between the systems when measured by responses to Pakeha and Maori. While values for Pakeha were not significant, values for Maori were found to be so [see Tables XIV and XVII], and the hypothesis was rejected. This finding will be related to the outcome of hypothesis IV in later discussion.

Hypothesis XII dealt with one indicator of political judgements and no differences were expected in responses to the item Prime Minister. No differences were found and the hypothesis is confirmed.

Hypothesis XIII postulated that self-image could affect perceptual responses and that State young persons [Yogate] would have less positive responses to the item I-Myself than their opposite role-group [Yognon]. Looking to the means of the responses on that item [Table XV], and to the unadjusted contrast values [Table XVII], this hypothesis was confirmed, because, consistently State young persons judged themselves less positively than did the non-State youngsters.

Hypothesis XIV claimed that the experiences of the young persons in the State system would be reflected in less positive responses towards apparent authority figures [Housemaster, Social Worker and Teacher] and law enforcement roles [Magistrate, Policeman]. The part of the hypothesis relating to perceptions of authority figures, could not be sustained by the data. However, clear distinctions were observed in the responses of the two role-groups [Yogate and Yognon] when the mean values were examined for each variable covered by Magistrate and Policeman. The hypothesis as put was rejected but when divided into its two segments there was evidence to

support the notion that State youngsters have less positive perceptions relating to law enforcement.

#### Discussion of Results

An interpretation of the findings is offered in this section following the same lines as the topic sequence used in the first part of this chapter.

It seems likely that the higher response rate of the State system rested on two main factors. The first was the fact that the project was accorded official recognition in the State system [Appendix J] and local controlling officers may have felt bound to follow a request from their head office. No such constraints operated in the non-State system. The second main factor appeared to be based on professional commitment. It was found that the role of statutory manager of a registered children's home, was a part-time one, secondary to another occupation, often unrelated to child care. From the replies of this group who wrote declining participation, it seems that they did not consider themselves sufficiently involved in residential care to be able to judge any aspects of it.

Alternative explanations for the low non-State response rate might centre around the nature of the survey instrument which the findings have shown differentiates largely on the basis of perceptions of the roles of social control agents. This emphasis may have seemed irrelevant to those more concerned with the tasks of substitute care for dependent children than that of re-socialization of young persons.

Such an explanation may also account for the differences observed in the two distinguishing characteristics of young persons' role-groups; their ethnic origin and the length of time they were associated with child care. Drawing again on the schema [Figure i] proposed in Chapter II, there is cause to suspect that the reasons why children are admitted to residential care determines also which system receives them. The findings showed that young persons in the non-State system come into care earlier and remain longer, and, therefore the

cause of their admission was likely to be family pathology (Segment A of Figure 1). The shorter average stay of young persons in the State system seems to be related to the need of the child (Segment B). Moreover, the decision in this study to poll only young persons over thirteen years of age obscured the fact that the directories of institutions for the two systems show that the non-State system offers proportionately more places to younger children than does the State system. This line of argument has not introduced the fact that both systems operate alternate forms of substitute care for children and the relationship between the practices of fostering, small-group care and residential care need to be investigated. Nevertheless, combining these facts with the findings that

". . . juvenile offending is mostly a boys' problem which increases rapidly with age and that offending rates for Maoris are markedly higher than they are for non-Maoris,"

[Department of Social Welfare, 1973, p.13]

reinforces the view that the two systems have different intake criteria based on distinctive goals.

The differences between the staff of the two systems on their average length of association with child care is probably mainly a function of the "closed-shop" nature of the public service tradition prevailing in the Department of Social Welfare. This is a hierarchical, bureaucratic system with rewards for merit, length of service and employment mobility. There is a policy of inducting young adults and providing them with a life-long career structure. The fragmented nature [31 separate agencies] of the non-State system limits such career possibilities, with the notable exception of the Salvation Army social services branch. This explanation was supported by the unequal age ranges of the equivalent role-groups of directors and social workers (Table IX). Without an induction and training programme and avenues for promotion and with little mobility, the non-State system must take their staff as they can find them.

The disparity between the observed and expected proportions of housestaff in different ethnic groups in the two systems

is not easy to explain. Speculatively, the answer probably lies partly in an unstated positive discrimination policy in regard to the employment of Maoris in Social Welfare institutions, and partly in the background and personalities of people, Maori and European, who elect to enter one system or the other. This phenomenon requires greater attention than the available data will permit.

The similarities between the two systems deserve some comment. Although the attempt to compare regional distribution [Table VI] produced no meaningful differences, there is a centralization factor based on population concentrations common to both systems. For example, the whole West Coast region and some smaller provincial centres such as Tauranga, Napier, New Plymouth and Ashburton contained no institutions at all which meet the criteria. While the centralization feature has been greater for the State institutions, with fewer to spread across the country, it seems there is a tendency for both systems to be related to population density. This has not always been so in the past.

The congruence between the average ages of the equivalent role-groups can be explained as a developmental feature hardly unique to residential child care. It is expected that people in child-rearing roles will be within a specified age range and that senior staff will be older as they gain their qualifying experience. As previously suggested, there is a clear relationship between age and experience in the non-residential roles of directors and social workers. Non-State directors do not have to wait to "fill dead-mens shoes". Non-State social workers on the other hand are likely to be older upon their first appointment to that role than their State colleagues. The equivalence of males and females in comparable staff role-groups tends to suggest that both systems adhere to the notion that males will take administrative leadership and that females will largely concern themselves with basic care tasks with children. As roll numbers were not asked for, no comment can be made about staff-inmate ratios.

The findings on the reliability of the semantic differential instrument used appear to depend on two features, the serial positioning of some apparently highly emotive stimulus items and the phenomenon of stereotypy, or the tendency to move progressively towards the median interval. These influences are depicted graphically in Figure 13. Up to two thirds of all respondents refused to make discriminatory judgements about the stimulus items Pakeha and Maori. This attitude appeared to have transferred also to the one stimulus item, A Poor Person, which separated them in sequence. In reliability group two, those items came fifth, six and seventh respectively out of the total eighteen items. In group one they came fifteenth, sixteenth and seventeenth. The response totals show that group two respondents commenced making either median or nil responses at that earlier position in the sequence and continued at that level over the remaining items. For group one, stereotypy progressed at a limited but steady rate until it was accelerated by the advent of the emotive items near the end of their particular sequence. The optimistic view was taken that the equal distribution of reliability grouping among each role-group would compensate for these effects although they remain undesirable features that need more careful evaluation at the pilot test stage.

The perception of relevant roles and objects was the second dimension on which similarities and differences between the systems was investigated, and of the eighteen stimulus items presented, seven were found to discriminate between the systems. Taken overall, it is suggested that most of this variation can be related to the directions postulated for the differences in ethnicity and period of association with child care. That is, the State system is much more sensitised to the world of juvenile offending and to the re-socialization of children who first come into care at or around the stage of adolescence, the initial peak of their acting-out behaviour. The non-State system, focussed on the younger child and concerned with long-term substitute care, fails to share the perceptions of law-enforcement roles in the same way.

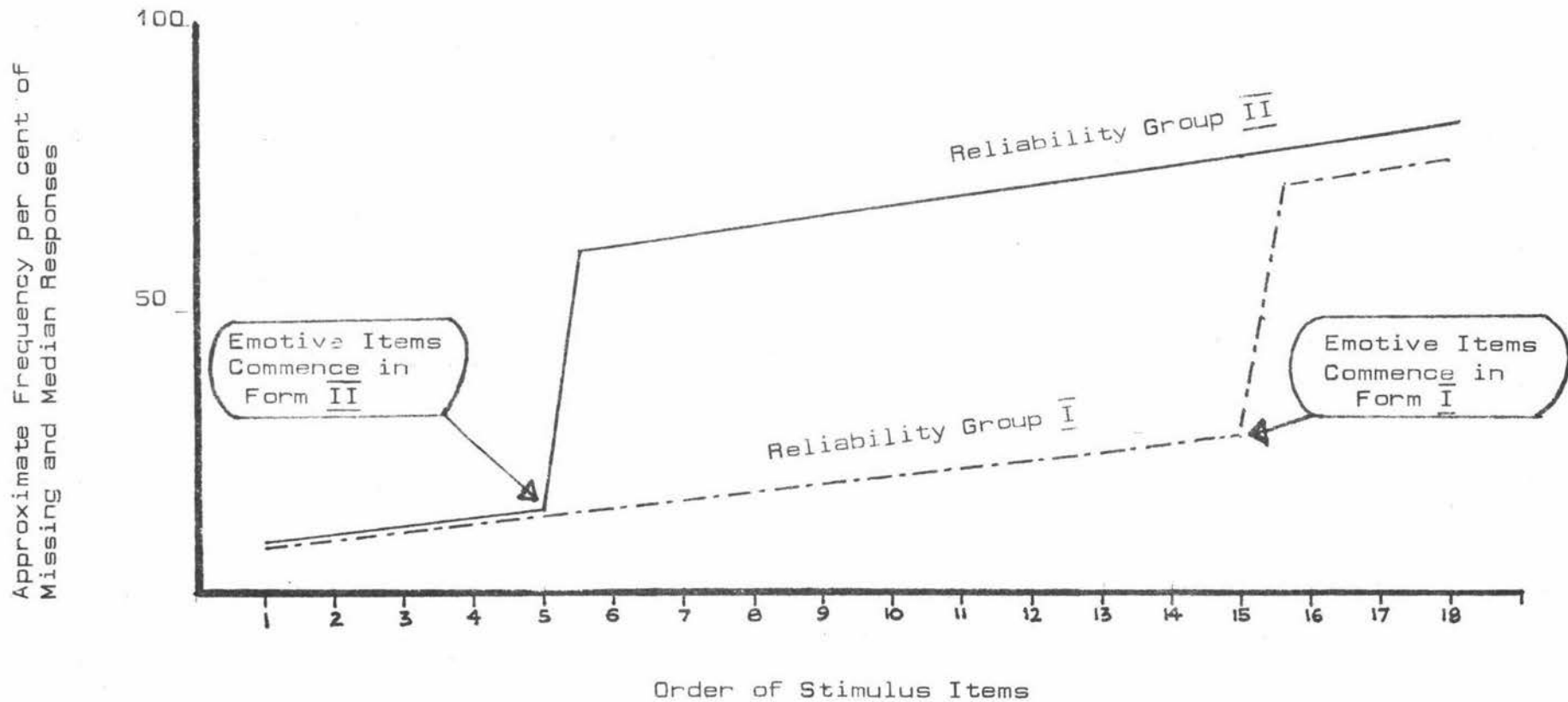


FIGURE 13

Illustration of the Influence of Position of Stimulus Items and Stereotypy upon Response Rate

The variation in perceptions of the term Friend seems difficult to explain. Tentatively, it may be hypothesized that the Christian values of concept of friendship were operating in this case although a religiosity factor was not otherwise revealed, e.g. by the item Church. The failure to control for the variable Race in the analysis of results makes it difficult to be certain about the meaning of the discrimination on the stimulus word Maori. It seems likely that this variance is an artefact of the disproportionate racial distribution in the two systems. Two explanations offer themselves on the matter of variance in perceptions of Housemaster. Firstly, it seems this term is more common in the State system and there are more role-models available to State respondents. Secondly, as noted in the literature review, there is a tendency to undervalue residential roles in comparison to other social work positions.

Finally, in this discussion, a brief mention is made of the perceptions of role-groups when compared both within and across systems. These trends are drawn from the contrast values in Table XVII. For example, even controlling for sex and for age, it is obvious that the perceptions of young persons in care differ significantly from those caring for them. In addition, there are good indications that the perceptions of non-residential staff contrast with those working close to the children. Moreover, the perceptions of some role-groups may be aligned more with those of the opposite system than with their own in certain cases.

## CHAPTER VII

### CONCLUSIONS

This study set out to describe and explain certain aspects of residential child care in New Zealand. The supporting literature was found to be sparse, uninformative and generally critical of existing services. The international literature confirmed the view that this field had received little productive research attention and, that as an area of study, it contained few, if any, well-formulated definitions of concepts. The answers to fundamental questions on the nature of residential child care, such as the dynamics of admission selection and procedures, have remained obscure.

The search for theoretical bases and research models identified five so-called Milestone Studies which have contributed in a general way to an understanding of the residential organization or children's institutions in particular. Some guidelines were drawn from those studies but none offered a framework for studying whole systems. The tenets of General Systems Theory gave a foundation to a theoretical framework most relevant to the goals of this study, and the research model constructed came up to the expectations held of it. The associated constructs of perceptual-process, role-taking and system-matrix were operationalised successfully through the formulation of six theoretical propositions cumulating those processes. The tactic of assigning the population to role-groups appeared to have adequate validity when the perceptions of these groups were compared and contrasted within their system-matrices. The perceptual measurement strategy showed some utility when applied within this limited systems approach. Some verifiable facts and generalizations were produced allowing further testing or expansion of these concepts.

This research has produced a generalised view of the residential child care enterprise in New Zealand based on the characteristics and some perceptions held by its constituents. It has confirmed the existence of two distinct and somewhat complementary systems. For the first time data on the nature of these systems has been brought together in a limited form of census. Specifically,

the State system, operating fewer (21) institutions under one central agency, but employing more staff and caring for more children over thirteen years of age, was contrasted with a range of 46 non-State institutions operated by 31 separate agencies. Although there was a superficial parity between the equivalent staff role-groups in the two systems, closer examination showed distinct career patterns in each.

The career patterns of the children in care showed marked differences also. It was claimed that these differences were attributable to the unique goals and operations of the two systems. On the one hand, the State system was more concerned with re-socialization of the young offender, likely to be non-European, held only temporarily in residential care. On the other hand, the non-State system offered long-term care to younger dependent children who were predominantly European. If these generalizations can be confirmed, there are some foundations for a predictive model to help answer the questions about the way in which children are assigned to one mode of care or another.

In general, both systems showed some similarities in staffing patterns; both were male dominated at senior positions with females relegated to child-oriented roles rather than administrative positions. It was established that position within the system was the critical variable differentiating the individual's perception of associated roles and concepts. At the same time, it was thought likely that variables of age, sex and previous experience determined that position. On that basis, the research undertaken has given some leads to methods of predicting role expectations in this area.

Co-incidentally, a contribution was made in some small way to the semantic differential method as a research approach, through the use of a comparatively large population of mixed ages and roles in a real-life situation completing, by previous standards, what was a lengthy instrument. Contrary to earlier reported findings in this area, some serious considerations were raised about the effects of the serial

ordering of stimulus items. The generalization was confirmed that the meaning attributed to bi-polar adjectival anchors is a function of the stimulus items with which they are grouped.

The methodology employed was expensive in all respects and the question must be raised whether this form of research adequately re-paid the investment or whether similar or better results could have been achieved more economically in both time and money? The size and complexity of this project made that question difficult to answer in the absence of comparative studies in this subject but raises further doubts about the utility of the descriptive approach as a research method. A firm structure designed to explain cause and effect may allow greater control and be more productive in the end result. A cautionary note can be made that amassing vast arrays of data is an unweildy process that may subvert desired treatment techniques, as, in this case, the failure to mount factor analysis. Clearly, the data assembled were a source of more extensive treatment than was able to be applied in this study.

The modest goals of this study were attained and a significant excursion was made into an area of social concern that has been hitherto unexplored. It is hoped that this beginning may stimulate further interest in the substitute care of children as a research area.

APPENDIX A  
INITIAL CIRCULAR LETTER REQUESTING  
PARTICIPATION IN SURVEY

Project RCC,  
C/- Education Department,  
Massey University,  
FALMERSTON NORTH

30 July 1975

Dear Colleague,

'PROJECT RESIDENTIAL CHILD CARE'

Project RCC is a post-graduate research exercise designed to gather views on New Zealand practices in caring for children and young persons in residential settings. It does not include hospitals, special schools or I.H.C. facilities.

I write to seek your help in obtaining this information through allowing your staff, and, in homes, residents thirteen years of age and over, to complete a survey form. Fuller details are given on the reply form two copies of which are enclosed so that you may keep one for your records. A suggested staff notice is also enclosed.

This project has been approved by the Director-General of Social Welfare where it covers his staff and his wards. That approval is conditional upon entirely voluntary participation by each individual approached and upon the customary undertaking on confidentiality. No names are required. The forms are numbered simply to keep track of responses.

I believe that this project may be a step towards describing and defining an area which has attracted little research attention. In fact, the most recent New Zealand work is H.C. Mathew's study on church children's homes published by N.Z.C.E.A. in 1942 ! As a residential worker I have an investment in promoting understanding of our tasks and I appeal to you for help in gathering material.

'Census Day', to avoid including the same people twice, is set for Wednesday 17 September, 1975. Please return your reply form promptly, but feel free to write for more information if necessary, or telephone me, collect, at Levin 83.869.

Yours sincerely,

D.J. McDonald

## APPENDIX B

## REPLY FORM SUPPLIED WITH INITIAL CIRCULAR LETTER

REPLY FORM FOR Project RCC,  
C/- Education Department,  
Massey University,  
PALMERSTON NORTH

The survey form is a small booklet of 18 items which has been timed at 20 minutes average to complete. These are sent to the person nominated below to distribute within your agency. Each booklet has an individual stamped addressed envelope ready for mailing upon completion on 17 September, 1975.

Your group is indicated below.

Please indicate in the box on the right how many people you could ask to fill-in a survey form.

\* TO AGENCY ADMINISTRATORS

Directors/Assistant Directors/Chairmen

- |  |             |                                |
|--|-------------|--------------------------------|
| 1. Yourself  | ]           |                                |
| 2. Your immediate deputies   | ] . . . . . | <input type="text" value="A"/> |
| 3. The social worker(s) who has direct and continuing responsibility for or with your children's home(s) . . . . . |             | <input type="text" value="F"/> |

\* TO RESIDENT HEADS OF HOMES

- |  |                       |                                |
|--|-----------------------|--------------------------------|
| Principals/Managers/Matrons.   | 1. Yourself . . . . . | <input type="text" value="B"/> |
| 2. Young persons in residence 13 years and over, i.e. born on or before 17.9.62  |                       | <input type="text" value="C"/> |
| 3. House staff. That is, Assistant Principals, Managers, Housemistresses, Housemasters, Housemothers, Housefathers, Matrons and sub-Matrons only.              |                       | <input type="text" value="G"/> |
| 4. Visiting Professionals, Part-time teachers, psychiatrist, doctor, dentist and others who actually visit your home . . . . . [not psychologists - see below] |                       | <input type="text" value="H"/> |
| 5. Teachers attached . . . . .   |                       | <input type="text" value="E"/> |

\* TO DISTRICT / SENIOR PSYCHOLOGISTS

- |  |  |                                |
|--|--|--------------------------------|
| 1. Yourself plus . . . . .   |  | <input type="text" value="D"/> |
| 2. Psychologists who are regularly consulting on children in children's homes [excluding hospitals, special schools and I.H.C. facilities] |  |                                |

IMPORTANT

Complete details for person to whom forms will be sent for distribution

name  
address

APPENDIX C  
ANNOUNCEMENT TO POTENTIAL STAFF RESPONDENTS  
SUPPLIED WITH INITIAL CIRCULAR LETTER

30 July, 1975

C/- Education Department,  
Massey University,  
PALMERSTON NORTH.

STAFF NOTICE BOARD / CIRCULATION

PROJECT RCC - an investigation in residential child care

On or before 17 September next some child care workers can expect to be approached through their agency to complete a survey form. It is a straightforward task of rating some 18 items which takes in total about 20 minutes to complete. No names are required and the forms come ready to put in the post upon completion.

I make a special and personal plea for full participation. Later, I hope to be able to share the findings of this investigation which will be of interest to all of us involved in the residential care of children.

Children in care (over age 13), social workers, psychologists, and others associated with children's homes are also being asked to complete a survey form to give the fullest picture as others see us.

D.J. McDonald

## APPENDIX D

MEMORANDUM ON INTERNAL ADMINISTRATION CIRCULATED  
TO RESIDENT HEADS OF CHILDREN'S HOMES

30 July, 1975

PROJECT RCC

Memo to -

Resident Heads of Children's Homes

If you have a school attached to your institution please consider asking your Senior Teacher to undertake the administration of the survey forms to children in residence born on or before 17.9.62, whether in school or not.

Group administration instructions could then be issued with the bulk forms.

It may be that the same person would also undertake to handle the announcement and distribution of the individual forms to staff, visiting professionals and other teachers? I think this would make for easier arrangements on all sides if this can be done.

On the question of projecting numbers for 17 September, please over-estimate slightly if your roll is subject to change.

Finally, I appreciate what extra burdens like this means, especially to smaller homes, and I can only repeat that I hope some useful information may come out to help our wider understanding.

D.J. McDonald

APPENDIX E  
FOLLOW-UP LETTER TO THOSE PEOPLE WHO HAD NOT  
REPLIED TO INITIAL CIRCULAR LETTER TWO  
WEEKS BEFORE CENSUS DAY

Project RCC,  
C/- Education Department,  
Massey University,  
PALMERSTON NORTH

5 September, 1975.

Dear Colleague,

I write to you again as I do not seem to have received any response from my letter of 31 July last.

In that letter I explained that 'Project Residential Child Care' is a post-graduate research exercise designed to gather views on New Zealand practices in caring for children and young persons in residential settings. Homes and individuals all over the country have now agreed to participate by completing a survey form on 17 September next.

To be truly representative of this specialised field, the views of all involved should be gathered. Would you please look again at the material that I sent you earlier and consider whether you can let me have a reply as soon as possible please ?

If your reply has been dispatched in the last few days and is still in the mail please disregard this note. If, however, your reply should have reached me by this date I'd be grateful if you would let me know that it has gone astray.

As time is running short, I repeat my earlier offer that you are welcome to 'phone me at Levin 83.869, collect, to let me know how many forms you would require for 'Census Day'.

Yours sincerely,

D.J. McDonald

APPENDIX F  
COVERING LETTER SENT WITH SURVEY BOOKLETS

5 September, 1975

Project RCC,  
c/- Education Department,  
Massey University,  
PALMERSTON NORTH.

Many thanks for agreeing to participate in this project.

According to your reply, you require for distribution . . .  
forms ; that number is enclosed.

Where applicable, group administration instructions are  
also enclosed.

Forms should be completed on Wednesday 17 September next  
or as close to that day as possible.

Response to my earlier letter has been most supportive.  
Please accept my sincere thanks for your help and pass  
on my gratitude to everyone involved.

D.J. McDonald

## APPENDIX G

## GROUP ADMINISTRATION INSTRUCTIONS

September, 1975

Project RCC,  
 c/- Education Department,  
 Massey University,  
PALMERSTON NORTH

INSTRUCTIONS FOR GROUP ADMINISTRATION  
 OF SURVEY FORMS

- i Leaders should complete their own form before taking the group.
- ii Note that there are two varieties of the same form. Every group has an equal number of each type. In type I items 10-18 precede items 1-9. In type II items 1-18 run consecutively.
- iii The booklets were collated and stapled manually through the generous help of some young people. While every effort was made to ensure perfect copies, there may be imperfections in some booklets such as missing pages, duplication, reversals and margin errors. Where this is brought to your attention please ask the respondent to just do the best possible with that form.
- iv Wednesday 17 September, 1975 is set as 'Census Day'. If that day is not suitable please try to administer the form at most one or two days either side of that date.
- v The form takes approximately 20 minutes to complete. Allow about ten minutes for introductions. You may wish to budget time at the finish to discuss the idea behind the project.
- vi Please schedule the time for the early part of the day or at a time when contiguous activities will not influence physical or mental capacity.

ADMINISTRATION

- 1 Ensure everyone has pen or pencil - the darker the better.
- 2 Distribute envelopes and introduce along lines -  
 'We have all been asked to take part in this project, a task which I think you will find of interest. Let's look at the instructions together, fill in the booklets and then discuss it afterwards'
- 3 Leader reads aloud pages a, b, and c with group reading own copies. Accept questions where necessary. **FILL IN PAGE A BEFORE GOING ON.** Accept questions as necessary. Pause at page c for final questions then say  
 'Let's look at the example [page D, 'FARMER']. Is everybody clear on what to do?' Clarify - begin.
- 4 Once scoring has begun please keep talking to a minimum and encourage respondents to work at high speed. Booklets are returned to envelope as finished and passed in for mailing.
- 5 A list of standardised responses is attached. Please keep this handy during the briefing and use the suggested format as much as possible. Clearly, these will not cover every contingency. At that stage it is best to say as little as is necessary to ensure that the respondent understands the task.

## APPENDIX H

INSTRUCTIONS FOR STANDARDISED RESPONSES TO ITEMS IN  
SURVEY BOOKLET SUPPLIED FOR GROUP ADMINISTRATION

September, 1975

PROJECT RCC

STANDARDISED RESPONSES FOR SURVEY FORM ITEMS

PAGE A TOWN The name of the place where we are now  
 NAME OF HOME ditto  
 POSITION In the case of young people, please have  
 them use either the term 'STUDENT' or  
 'RESIDENT'  
 M/F Tick the box  
 YEAR OF BIRTH  
 RACE Tick the box - the person decides whether  
 they are Maori or pakeha or enters their  
 group if neither of those two  
 No. of YEARS ASSOCIATED WITH CHILD CARE  
 How many years have been resident in a  
 children's home

RATING SCALES Most of the bi-polar adjectives are well  
 within elementary reading comprehension.  
 Two are clarified thus

PASSIVE ' Somebody who takes things quietly - does not  
 say or do a lot '

ACTIVE ' Somebody who is always on the go '

KEYWORDS

TEACHER common usage  
 DELINQUENT ' Somebody who gets into trouble '  
 WELFARE HOME 'where kids who can't be in their own homes  
 are looked after'  
 MOTHER common usage  
 MAGISTRATE ' The person who hears cases in a court of law '  
 HOUSEMASTER ' The person who looks after children in homes '  
 FATHER common usage  
 I - MYSELF ' Mark this as you think these things apply to you '  
 ORPHANAGE ' The old-fashioned name for a children's home '  
 PRIME MINISTER ' The head of government '  
 POLICEMAN common usage  
 FRIEND common usage  
 SOCIAL WORKER ' Somebody who tries to help others '  
 PAKEHA ' A New Zealander of European ancestors -  
 usually white skinned '  
 POOR PERSON ' Somebody without sufficient money or possessions '  
 MAORI common usage  
 CHURCH ' The Church in general - think of your own church  
 or that one and church people you know best '  
 STATE WARD ' Somebody in the care of Social Welfare - because  
 their own parents are unable to care for them  
 at the time '

CONFIDENTIAL TO LEADERS : Where you feel that a young  
 person's response has been invalidated through lack of  
 comprehension (or lack of motivation) and wish to draw  
 attention to this, please mark the top right box on the  
 cover sheet - number 2345 - with the letters ' CD '



PAGE 2

b.

In this project we are studying what certain things mean to people. Please complete this booklet according to what these mean to YOU.

This is not a test; there are no right or wrong answers.

At the top of each page you will find the name of the things to be judged, and below it some pairs of words separated by seven spaces.

Here is how to use these pairs of words.

If you feel that the item to be judged is VERY CLOSELY RELATED to one of the words, place a cross as follows.

OR      GOOD      X   : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_      BAD  
          WEAK    \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ :   X        STRONG

If it seems QUITE CLOSELY RELATED then mark

OR      GOOD    \_\_\_ :   X   : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_      BAD  
          WEAK    \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ :   X   : \_\_\_      STRONG

Where it seems ONLY SLIGHTLY RELATED mark three spaces away

OR      GOOD    \_\_\_ : \_\_\_ :   X   : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_      BAD  
          WEAK    \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ :   X   : \_\_\_ : \_\_\_      STRONG

If you consider the thing to be EQUALLY RELATED to both words, or if the words seem completely unrelated to it, place a cross in the middle space

GOOD    \_\_\_ : \_\_\_ : \_\_\_ :   X   : \_\_\_ : \_\_\_ : \_\_\_      BAD

---

PAGE 3

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c.

IMPORTANT

1. Place your crosses in the centre of the spaces - not on the dots in between them.
2. Be sure to put a cross between every pair of words on every page - DO NOT LEAVE ANY OUT.
3. Never put more than one cross between a pair of words.

Please do not look back and forth through the pairs of words or through the pages, and do not try to remember how you placed your crosses earlier. MAKE EACH CROSS A SEPARATE JUDGMENT. Work at fairly high speed. Do not worry or puzzle over individual items. It is your first impressions, your immediate feelings that we want.

THE NEXT PAGE IS COMPLETED AS AN EXAMPLE.

\* \* \* \* \*

When you have completed the booklet put it back in the envelope ready for mailing.

THANK YOU FOR YOUR HELP IN THIS PROJECT

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PAGE 4 consisted of the example FARMER previously reproduced on page 70.

PAGES 5 - 23 carried the semantic differential scales headed by the stimulus items, one to each page. The order in which they were arranged for the two forms of the booklet are shown on page 77.

## APPENDIX J

TEXT OF MEMORANDUM PREPARED BY THE AUTHOR AND  
CIRCULATED BY THE HEAD OFFICE OF THE  
DEPARTMENT OF SOCIAL WELFARE TO  
ALL OFFICES AND INSTITUTIONS  
OF THAT DEPARTMENT

PROJECT RCC - Massey University

Approval has been given to D.J. McDonald of Kohitere to solicit questionnaire-type responses from departmental officers and certain children in care, as part of his masterate studies. The survey is known as 'Project RCC, C/o Education Department, Massey University, Palmerston North.

Responses are anonymous and the usual ethical considerations are guaranteed. 'Census Day' is to be 17 September, 1975, and controlling officers should facilitate the preliminaries required to give access to respondents. However, although participation in the survey is recommended, all officers are reminded that this is on a voluntary basis.

## APPENDIX K

## CODING MANUAL

PART ONE : Punched card column  
layout

## CARD ONE

## COL

1	Card number - not specified
2.3.4.5	Identification number - shown red machine print
6.7	Region
8.9	Agency
10.11	Unit
12.13	Respondent position
14	Sex / gender
15.16	Age
17	Ethnic origin
18.19	Years of experience/association
20	Reliability test group
21.22	Validity rating
23-36	Stimulus items one
37-50	two
51-64	three
65-78	four

## CARD TWO

## COL

1	Card number
2.3.4.5	Identification number
6-19	Stimulus items five
20-33	six
34-47	seven
48-61	eight
62-75	nine

## CARD THREE

As for card two - stimulus items ten to fourteen

## CARD FOUR

As for card three - stimulus items fifteen to eighteen

## Coding Manual

PART TWO : Response value coding by column

COLUMN 1 Card number

COL 2-3-4-5 Case identification number

COL 6-7 REGION

01	Whangarei
02	North Shore / Auckland
03	Auckland
04	Otahuhu / South Auckland
05	Hamilton
06	Rotorua
07	Tauranga
08	New Plymouth
09	Wanganui
10	Palmerston North
11	Gisborne
12	Napier
13	Hastings / Havelock North
14	Masterton / Wairarapa
15	Porirua
16	Lower Hutt
17	Wellington
18	Nelson
19	Christchurch
20	Timaru / Temuka
21	West Coast
22	Dunedin
23	Southland

## COL 8 - 9 A G E N C Y

00 Not stated/not known  
 01 North Auckland Protestant Children's Home  
 02 North Auckland Residential Nursery  
 03 Word of Faith  
 04 Catholic Social Services, Auckland  
 05 Presbyterian Social Services Assn., Auckland  
 06 Methodist Social Services, Auckland  
 07 Salvation Army - National  
 08 Dingwall Trust  
 09 Manurewa Church Home  
 10 Anglican Children's Trust  
 11 Dr. Barnardo's  
 12 Margaret Watt, Wanganui  
 13 Marton & Otaki Children's Home Trust Board  
 14 Hemi Materoa  
 15 Anglican Social Services, Waiapu  
 16 Presbyterian Social Services Assn., Havelock North  
 17 Masterton Methodist Children's Home  
 18 Catholic Social Services, Wellington  
 19 Anglican City Mission, Wellington  
 20 Presbyterian Social Services Assn., Wellington  
 21 Kirkpatrick House, Nelson  
 22 Catholic Social Services, Christchurch  
 23 Anglican Social Services, Christchurch  
 24 Methodist South Island Children's Homes  
 25 Presbyterian Social Services Assn., Christchurch  
 26 Cholmondeley  
 27 Ford Milton  
 28 Presbyterian Social Services Assn., South Canterbury  
 29 Presbyterian Social Services Assn., Dunedin  
 30 Catholic Social Services, Dunedin  
 31 Presbyterian Social Services Assn., Southland

40 Social Welfare - district offices  
 50 Social Welfare - institutions  
 60 Department of Education - Psychological Services

## COL 10 - 11            U N I T

00            Not stated / not known  
 01            Agency office  
 02            Sole institution

Coding where agency runs more than one home

## COL 8 - 9

04            02 St. Josephs, Auckland  
               03 Rosemount School, Auckland  
               04 St. Vincents Home of Compassion, Auckland  
               05 Star of the Sea, Howick

07            02 The Grange, Remuera  
               03 Mary Bryant, Hamilton  
               04 The Nest, Hamilton  
               05 Hodderville  
               06 Whatman, Masterton  
               07 Residential Nursery, Wellington  
               08 Temuka

18            02 Home of Compassion, Wellington  
               03 Marycrest, Te Horo  
               04 Sunnybank, Nelson

22            02 St. Josephs, Christchurch  
               03 Nazareth House, Christchurch

24            02 Harewood Road, Christchurch  
               03 Barrington Street, Christchurch

31            02 Inglenook, Gore  
               03 Sutherland Home, Invercargill  
               04 Highfield, Invercargill

COL 10 - 11

## UNIT

COL 8 - 9

## SOCIAL WELFARE DISTRICT OFFICES

40	01	Whangarei
	02	Takapuna
	03	Auckland
	04	Otahuhu
	05	Pukekohe
	06	Hamilton
	07	Wanganui
	08	Palmerston North
	09	Hastings
	10	Masterton
	11	Lower Hutt
	12	Wellington
	13	Nelson
	14	Christchurch
	15	Timaru
	16	Dunedin
	17	Invercargill

## SOCIAL WELFARE INSTITUTIONS

50	01	Owairaka Boys' Home
	02	Allendale Girls' Home
	03	Bollard Avenue Girls' Home
	04	Cornwall Park Reception Centre
	05	Weymouth
	06	Tower Hill Reception Centre
	07	Dey Street Girls' Home
	08	Hamilton Boys' Home
	09	Palmerston North Girls' Home
	10	Kohitere
	11	Hokio
	12	Fareham
	13	Epuni Boys' Home
	14	Miramar
	15	Kingslea
	16	Christchurch Girls' Home
	17	Christchurch Boys' Home
	18	Dunedin Boys' Home
	19	Dunedin Girls' Home
	20	Holdsworth
	21	Arbor House, Greytown

COL 10 - 11

U N I T

COL 8 - 9

PSYCHOLOGICAL SERVICES

60	01	Whangarei
	02	Takapuna
	03	Auckland
	04	New Lynn
	05	Mangere
	06	Papakura
	07	Hamilton
	08	Rotorua
	09	Gisborne
	10	Napier
	11	New Plymouth
	12	Wanganui
	13	Palmerston North
	14	Porirua
	15	Lower Hutt
	16	Wellington
	17	Nelson
	18	Westport / Greymouth
	19	Christchurch
	20	Timaru
	21	Dunedin
	22	Southland

COL	12 - 13	POSITION (ROLE)	
01		Director / Assistant Director	STATE
02			NON-STATE
03		Social worker	STATE
04			NON-STATE
05		Principals / Assistants	STATE
06			NON-STATE
07		Housemaster / Mistresses	STATE
08			NON-STATE
09		Ancillary staff	STATE
10			NON-STATE
11		Visiting professionals	STATE
12			NON-STATE
13		Teachers	STATE
14			NON-STATE
15		Young persons	STATE
16			NON-STATE
17		Psychologists	
18		Matron / Sub Matron	STATE
19			NON-STATE

COL	14	Not Stated
	SEX	Male
		Female

COL	15 - 16	AGE	Raw number
-----	---------	-----	------------

COL	17	0	Not stated
Ethnic origin		1	Maori
		2	Maori / Pakeha
		3	Maori / Pacific Islander
		4	Pakeha
		5	Pakeha / Pacific Islander
		6	Pacific Islander
		7	Maori / Other
		8	Reserved
		9	All Others

COL	18 - 19	Years associated with child care raw number
		51 less than one month
		52 less than four months
		53 less than seven months
		54 less than twelve months

COL	20	1	Reliability group one
		2	two

COL	21 - 22	BLANK	valid
		00	valid
		01	invalid - rated CD
		02	invalid - scorer judgment
		03	invalid - + on lie scale
		04	valid to col 20 - refusal
		05	Page (a) blank
		06	invalid - below age 13

## APPENDIX L

STANDARD VALUES FOR RESPONSE ALTERNATIVES  
AS SHOWN ON GLASS CODING STENCIL

In the case of the MALE-FEMALE scale, high values were weighted towards the MALE end except for stimulus item MOTHER, and, in the case of female respondents, the stimulus item I-MYSELF, when the values were reversed.

The instruction given to coding assistants was the stencil was to be moved down one scale for all except the two cases mentioned above when the reading was to be taken from the scale below, by moving the stencil up one scale.

GOOD	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	BAD
WEAK	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	STRONG
FAST	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	SLOW
WISE	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	FOOLISH
MALE	_____ : _____ : _____ : <u>4</u> : _____ : _____ : _____	FEMALE
YOUNG	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	OLD
SWEET	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	SOUR
COLD	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	WARM
POOR	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	RICH
PASSIVE	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	ACTIVE
DIRTY	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u>	CLEAN
SOFT	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	HARD
NICE	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	AWFUL
LARGE	<u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u>	SMALL

## APPENDIX M

CODE NAMES FOR ROLE-GROUPS SHOWING  
DESIGNATIONS INCLUDED WITHIN  
EACH GROUP

- |     |        |  |
|-----|--------|--|
| 1.  | DIRATE | State directors and assistant directors.   |
| 2.  | DIRNON | Non-State directors and assistant directors, statutory managers and superintendents. |
| 3.  | SOCATE | State social workers.  |
| 4.  | SOCNON | Non-State social workers.  |
| 5.  | PRIATE | State principals and assistant principals.   |
| 6.  | PRINON | Non-State principals and assistant principals, managers, masters and their deputies. |
| 7.  | HOUATE | State housemasters and housemistresses.  |
| 8.  | HOUNON | Non-State housemasters, housemistresses, housefathers and housemothers.              |
| 9.  | YOGATE | Young persons in State homes.  |
| 10. | YOGNON | Young persons resident in Non-State homes.   |
| 11. | MATATE | State matrons and sub-matrons.   |
| 12. | MATNON | Non-State matrons and sub-matrons.   |
| 13. | ANCATE | State ancillary workers, cooks, gardeners, domestics, and matron's assistants.       |
| 14. | ANCNON | Non-State ancillary workers, cooks, gardeners, domestics and matron's assistants.    |
| 15. | VIPATE | State "visiting professionals", doctors, dentists, chaplains and nurses.             |
| 16. | VIPNON | Non-State "visiting professionals, doctors, and nurses.                              |
| 17. | TECATE | State employed teachers in Social Welfare institutions.                              |
| 18. | TECNON | Teachers attached to Non-State homes.  |
| 19. | PSYCHO | Psychologists of the Department of Education.  |

TABLE XV a

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item TEACHER

Role-Group	N	Scales								
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
Dirate	10	$\bar{X}$	4.78	3.78	4.00	4.11	4.00	3.67	3.50	
		SD	.91	1.03	.47	.74	.94	.67	.70	
		-m	1	1	1	1	1	1	2	
Dirnon	14	$\bar{X}$	5.85	5.31	4.31	5.46	4.00	3.77	4.15	
		SD	.92	.91	1.14	.63	.89	.89	.66	
		-m	1	1	1	1	1	1	1	
Socate	41	$\bar{X}$	5.31	5.00	4.47	4.95	4.13	3.72	4.05	
		SD	1.22	1.11	1.05	1.06	.97	1.01	.93	
		-m	2	2	2	2	2	2	2	
Socnon	13	$\bar{X}$	5.50	4.67	4.58	5.25	4.25	3.92	4.42	
		SD	.87	1.25	.64	1.09	1.53	.76	.76	
		-m	1	1	1	1	1	1	1	
Priate	27	$\bar{X}$	5.60	4.80	4.72	5.16	4.16	3.48	4.40	
		SD	.98	1.36	1.04	1.12	1.26	.94	.69	
		-m	2	2	2	2	2	2	2	
Prinon	13	$\bar{X}$	5.85	5.54	5.15	5.77	3.92	3.31	4.62	
		SD	1.29	1.01	1.10	.70	1.21	.72	.74	
		-m	0	0	0	0	0	0	0	
Houate	93	$\bar{X}$	5.67	4.89	4.63	5.59	4.09	3.76	4.48	
		SD	1.26	1.36	1.28	1.07	1.60	1.19	1.02	
		-m	3	5	5	5	3	4	4	
Hounon	35	$\bar{X}$	5.72	5.28	4.88	5.72	4.19	3.69	4.59	
		SD	1.21	1.13	1.24	1.04	1.81	1.16	1.00	
		-m	3	3	3	3	3	3	3	
Yogate	427	$\bar{X}$	5.07	4.42	4.55	5.51	4.74	3.85	4.15	
		SD	1.88	1.78	1.84	1.71	2.16	1.72	1.61	
		-m	13	12	18	17	16	14	16	
Yognon	84	$\bar{X}$	5.01	4.36	4.79	5.62	3.78	3.77	4.06	
		SD	1.86	1.70	1.71	1.76	2.34	1.71	1.47	
		-m	2	3	2	3	2	2	2	

Role-Group	N	Scales								
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small		
(10)	(11)	(12)	(13)	(14)	(15)	(16)				
Dirate	10	$\bar{X}$	4.45	4.22	4.67	5.33	4.33	4.44	3.63	
		SD	.96	.79	1.05	.94	.94	1.26	.70	
		-m	1	1	1	1	1	1	2	
Dirnon	14	$\bar{X}$	5.00	4.31	5.54	5.77	4.08	4.85	4.00	
		SD	.78	.72	.84	1.04	.92	.77	.00	
		-m	1	1	1	1	1	1	1	
Socate	41	$\bar{X}$	4.28	4.40	4.88	5.56	3.80	4.31	4.13	
		SD	1.20	1.31	1.32	1.24	.91	1.14	.61	
		-m	2	3	2	2	2	2	2	
Socnon	13	$\bar{X}$	4.50	4.42	5.25	5.83	3.33	5.00	4.50	
		SD	1.19	.76	.93	.99	.94	.70	1.12	
		-m	1	1	1	1	1	1	1	
Priate	27	$\bar{X}$	5.40	4.48	5.20	5.68	4.20	5.24	4.00	
		SD	.98	.85	1.67	.93	.80	.91	.75	
		-m	2	2	2	2	2	2	2	
Prinon	13	$\bar{X}$	5.31	4.31	5.62	5.77	3.46	5.46	4.15	
		SD	.99	.99	1.44	1.37	1.01	1.08	.36	
		-m	0	0	0	0	0	0	0	
Houate	93	$\bar{X}$	4.96	4.34	5.17	5.85	3.93	5.06	4.01	
		SD	1.31	.95	1.40	1.14	1.23	1.16	.80	
		-m	5	3	1	4	4	3	3	
Hounon	35	$\bar{X}$	5.16	4.66	5.34	6.03	3.59	5.50	3.97	
		SD	1.20	1.02	1.31	1.21	1.09	1.03	.73	
		-m	3	3	3	3	3	3	3	
Yogate	427	$\bar{X}$	4.56	4.47	4.90	5.71	3.87	4.60	4.00	
		SD	1.59	1.34	1.73	1.60	1.77	1.84	1.46	
		-m	15	19	18	16	19	14	15	
Yognon	84	$\bar{X}$	4.38	4.43	4.89	5.91	3.34	4.78	3.93	
		SD	1.67	1.34	1.70	1.48	1.66	1.94	1.35	
		-m	2	3	2	4	2	2	3	

APPENDIX N  
TABLES XV, XVI AND XVII

TABLE XV b

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-Group Responses to Semantic Differential Scales with Stimulus Item

## DELINQUENT

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 2.70 SD .78	2.60 1.02	3.30 1.27	1.90 .70	4.20 1.25	2.30 1.62	3.45 .96
		-m 0	0	0	0	0	0	1
Dirnon	14	$\bar{X}$ 2.92 SD 1.04	2.58 .95	3.08 1.26	2.50 .75	4.58 .86	2.33 1.11	3.00 1.00
		-m 2	2	2	2	2	2	2
Socate	41	$\bar{X}$ 3.05 SD 1.01	3.54 1.47	4.10 1.27	2.63 1.10	4.85 1.05	2.12 .97	3.32 1.02
		-m 0	0	0	0	0	0	0
Socnon	13	$\bar{X}$ 3.33 SD 1.11	3.25 1.53	3.08 1.12	2.67 .85	4.83 1.07	2.50 1.26	3.25 1.16
		-m 1	1	1	1	1	1	1
Priate	27	$\bar{X}$ 3.26 SD 1.03	3.09 1.28	3.83 1.27	2.30 .91	4.30 1.04	2.29 1.02	3.83 .92
		-m 4	4	4	4	4	3	4
Prinon	13	$\bar{X}$ 2.15 SD 1.29	2.46 1.60	3.50 1.85	1.69 .82	4.15 1.23	2.23 1.20	3.23 .80
		-m 0	0	1	0	0	0	0
Houate	93	$\bar{X}$ 2.97 SD 1.31	2.93 1.61	3.75 1.64	2.27 1.21	4.23 1.40	2.19 1.15	3.16 1.33
		-m 2	4	2	3	2	2	3
Hounon	35	$\bar{X}$ 2.94 SD 1.65	2.36 1.57	3.24 1.86	2.30 1.22	4.50 1.60	2.27 1.05	3.06 1.23
		-m 2	2	2	2	3	2	2
Yogate	427	$\bar{X}$ 3.03 SD 2.03	4.51 1.92	4.63 1.87	2.93 1.94	4.81 1.86	2.50 1.39	3.69 1.62
		-m 24	26	28	25	29	26	24
Yognon	84	$\bar{X}$ 2.32 SD 1.68	3.93 2.11	3.86 1.97	2.35 1.69	4.74 1.99	2.61 1.47	2.94 1.66
		-m 2	2	3	2	3	2	2

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 3.90 SD 1.14	2.40 .66	4.70 1.10	3.00 .76	3.40 1.28	3.70 1.01	3.67 .82
		-m 0	0	0	0	0	0	1
Dirnon	14	$\bar{X}$ 3.25 SD 1.23	2.50 1.12	4.62 1.55	2.75 1.23	3.17 1.34	3.25 1.09	3.83 .55
		-m 2	2	1	2	2	2	2
Socate	41	$\bar{X}$ 3.54 SD 1.25	2.54 .97	4.85 1.54	3.10 .96	3.20 1.17	3.88 1.04	3.72 .70
		-m 0	0	0	0	0	0	0
Socnon	13	$\bar{X}$ 3.08 SD 1.44	2.83 1.14	4.42 1.71	3.42 .95	3.33 1.65	4.00 1.18	3.67 1.18
		-m 1	1	1	1	1	1	1
Priate	27	$\bar{X}$ 3.78 SD 1.18	2.44 .92	5.30 1.20	3.30 .80	3.17 1.31	4.09 .78	4.00 1.16
		-m 4	4	4	4	4	4	2
Prinon	13	$\bar{X}$ 3.31 SD 1.14	2.85 1.03	5.00 1.96	3.23 .80	3.08 1.18	3.00 .96	3.85 .66
		-m 0	0	0	0	0	0	0
Houate	93	$\bar{X}$ 3.49 SD 1.45	2.57 1.15	4.86 1.71	2.98 1.15	3.23 1.58	3.67 1.36	3.91 .92
		-m 3	3	2	3	2	3	3
Hounon	35	$\bar{X}$ 2.88 SD 1.17	2.67 1.30	4.09 1.75	3.09 1.40	3.36 1.67	3.39 1.43	3.97 1.06
		-m 2	2	2	2	2	2	2
Yogate	427	$\bar{X}$ 3.76 SD 1.71	3.22 1.52	4.65 1.86	3.55 1.70	3.28 1.75	3.71 1.84	4.13 1.50
		-m 30	25	28	30	26	26	27
Yognon	84	$\bar{X}$ 2.98 SD 1.73	2.94 1.38	4.61 1.94	3.37 1.86	3.10 1.66	3.22 1.78	4.04 1.30
		-m 3	3	2	2	3	2	2

TABLE XV c

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item WELFARE HOME FOR BOYS AND GIRLS

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Dirate	10	$\bar{X}$ 4.44	5.11	3.89	4.44	4.56	3.89	3.13
		SD 1.34	.57	.74	.83	.83	1.10	.93
		-m 1	1	1	1	1	1	2
Dirnon	14	$\bar{X}$ 4.92	4.86	3.69	4.71	4.00	3.00	4.14
		SD 1.10	1.06	.61	1.10	.38	1.60	.83
		-m 0	0	1	0	0	0	0
Socate	41	$\bar{X}$ 4.72	4.82	3.80	4.18	4.23	2.67	3.87
		SD 1.36	1.22	.91	1.30	1.00	1.42	1.02
		-m 2	2	2	2	2	2	2
Socnon	13	$\bar{X}$ 4.00	4.83	3.25	3.92	4.33	2.92	3.50
		SD 1.16	1.21	1.23	1.32	.93	1.71	1.19
		-m 1	1	1	1	1	1	1
Priate	27	$\bar{X}$ 4.64	4.88	4.13	4.92	4.16	3.16	4.08
		SD 1.16	1.11	.97	.89	1.22	1.64	1.02
		-m 2	2	3	2	2	2	2
Prinon	13	$\bar{X}$ 5.69	5.15	4.69	5.39	4.25	3.08	4.15
		SD 1.54	1.10	.99	1.15	.60	1.21	1.03
		-m 0	0	0	0	1	0	0
Houate	93	$\bar{X}$ 5.24	5.01	3.73	5.14	4.22	3.01	4.15
		SD 1.38	1.36	1.12	1.26	1.22	1.49	.95
		-m 3	3	3	3	7	5	7
Hounon	35	$\bar{X}$ 4.67	4.56	4.32	4.78	4.08	3.03	4.38
		SD 1.74	1.63	1.20	1.63	1.59	1.59	1.14
		-m 3	3	4	3	3	3	3
Yogate	427	$\bar{X}$ 4.65	4.98	4.43	4.83	4.21	3.05	4.05
		SD 2.08	1.72	1.71	1.89	1.75	1.76	1.66
		-m 14	16	16	16	19	17	16
Yognon	84	$\bar{X}$ 5.23	5.09	4.54	5.23	3.98	3.15	4.35
		SD 1.81	1.40	1.34	1.67	1.53	1.56	1.46
		-m 1	2	2	2	5	3	4

Role-group	N	Scales						
		[10]	[11]	[12]	[13]	[14]	[15]	[16]
Dirate	10	$\bar{X}$ 3.78	4.11	5.11	5.44	3.00	4.11	5.00
		SD 1.32	.57	.74	1.17	1.16	1.37	1.41
		-m 1	1	1	1	1	1	2
Dirnon	14	$\bar{X}$ 4.71	3.71	5.21	5.57	4.00	4.36	4.43
		SD 1.28	.59	1.42	1.18	1.20	1.10	.90
		-m 0	0	0	0	0	0	0
Socate	41	$\bar{X}$ 4.41	3.92	4.92	5.64	3.41	3.92	4.31
		SD 1.79	1.10	1.53	1.42	1.15	1.19	1.51
		-m 2	2	2	2	2	2	2
Socnon	13	$\bar{X}$ 3.25	3.67	3.75	5.08	2.92	3.75	4.33
		SD 1.59	1.11	1.48	1.44	1.26	1.23	1.18
		-m 1	1	1	1	1	1	1
Priate	27	$\bar{X}$ 4.88	3.80	5.24	5.48	3.79	4.32	3.84
		SD 1.48	1.20	1.24	1.06	.87	1.26	1.46
		-m 3	2	2	2	3	2	2
Prinon	13	$\bar{X}$ 4.85	4.08	5.69	6.46	4.08	4.69	4.15
		SD 1.56	1.07	1.38	.93	1.69	1.14	1.23
		-m 0	0	0	0	0	0	0
Houate	93	$\bar{X}$ 5.05	3.98	5.30	5.74	3.56	4.80	4.47
		SD 1.46	1.16	1.55	1.35	1.15	1.14	1.64
		-m 5	4	3	3	4	3	3
Hounon	35	$\bar{X}$ 4.34	3.53	5.03	5.91	3.44	4.47	4.50
		SD 1.74	1.30	1.49	1.33	1.29	1.52	1.80
		-m 3	3	3	3	3	3	3
Yogate	427	$\bar{X}$ 4.45	4.31	4.93	5.44	3.52	4.21	4.80
		SD 1.73	1.64	1.83	1.84	1.79	1.90	1.51
		-m 19	19	19	17	16	18	18
Yognon	84	$\bar{X}$ 4.60	4.12	4.51	5.37	3.65	4.54	4.50
		SD 1.57	1.23	1.78	1.47	1.62	1.77	1.45
		-m 4	3	3	2	2	3	2

TABLE XV d

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item

MOTHER

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 5.50 SD .81 -m 0	4.50 1.50 0	4.00 1.34 0	4.70 1.10 0	5.10 2.70 0	5.40 .49 0	4.10 .94 0
Dirnon	14	$\bar{X}$ 6.31 SD .91 -m 1	5.54 1.08 1	4.77 1.31 1	5.85 .77 1	3.79 2.88 0	4.23 1.42 1	5.69 .82 1
Socate	41	$\bar{X}$ 5.05 SD 1.10 -m 0	5.65 1.32 0	4.44 1.06 0	5.63 1.03 0	5.20 2.63 0	4.88 1.36 0	5.56 1.60 0
Socnon	13	$\bar{X}$ 6.36 SD .77 -m 2	5.46 1.08 2	4.73 .75 2	5.36 .88 2	5.25 2.31 1	4.36 1.07 2	5.82 .83 2
Priate	27	$\bar{X}$ 6.16 SD 1.08 -m 2	5.00 1.50 2	4.24 1.33 2	5.48 1.14 2	4.28 2.76 2	5.20 1.10 2	5.88 .95 2
Prinon	13	$\bar{X}$ 5.62 SD 1.21 -m 0	4.77 1.12 0	5.77 1.05 0	5.77 1.04 0	3.31 2.92 0	5.08 1.33 0	6.23 .80 0
Houate	93	$\bar{X}$ 6.23 SD 1.10 -m 3	5.36 1.50 4	4.49 1.30 3	5.79 1.10 3	4.77 2.83 2	4.82 1.31 4	5.73 1.19 3
Hounon	35	$\bar{X}$ 6.39 SD 1.10 -m 2	5.61 1.32 2	5.03 1.11 2	6.15 1.10 2	5.43 2.43 0	4.52 1.08 2	6.00 1.04 2
Yogate	427	$\bar{X}$ 6.27 SD 1.54 -m 10	4.84 1.90 10	4.61 1.91 11	5.65 1.63 12	4.34 2.91 11	4.26 1.66 10	5.67 1.60 11
Yognon	84	$\bar{X}$ 6.36 SD 1.39 -m 3	4.91 1.78 3	4.84 1.68 4	5.75 1.49 3	3.92 2.94 4	4.17 1.54 3	5.63 1.43 3

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 5.40 SD .49 -m 0	4.10 .94 0	3.60 1.36 0	5.60 1.11 0	5.10 .70 0	5.40 .80 0	3.33 .82 1
Dirnon	14	$\bar{X}$ 6.15 SD .77 -m 1	4.08 .47 1	5.77 1.53 1	5.77 1.05 1	5.23 1.05 1	6.08 .83 1	4.08 1.14 1
Socate	41	$\bar{X}$ 6.24 SD 1.01 -m 0	4.12 .99 0	5.30 1.25 1	6.10 1.10 0	5.10 1.45 0	5.83 1.27 0	4.27 .99 0
Socnon	13	$\bar{X}$ 6.09 SD .67 -m 2	4.27 .86 2	5.55 1.08 2	5.73 .86 2	5.18 .72 2	5.73 .86 2	4.18 1.27 2
Priate	27	$\bar{X}$ 5.92 SD .98 -m 2	3.80 .94 2	4.48 1.81 2	6.24 .71 2	4.96 1.18 2	6.12 .71 2	4.00 1.52 2
Prinon	13	$\bar{X}$ 6.31 SD 1.20 -m 0	4.15 1.17 0	5.15 1.70 0	6.62 .74 0	5.31 1.32 0	6.46 .75 0	3.92 .83 0
Houate	93	$\bar{X}$ 6.00 SD 1.20 -m 3	4.19 1.28 3	5.12 1.69 3	6.19 1.01 3	5.21 1.33 5	6.10 1.14 3	3.89 1.38 5
Hounon	35	$\bar{X}$ 6.21 SD 1.15 -m 2	4.36 1.12 2	5.55 1.16 2	6.36 1.10 2	4.91 1.19 2	6.15 1.10 2	4.22 1.17 2
Yogate	427	$\bar{X}$ 5.72 SD 1.63 -m 11	4.37 1.37 11	4.72 1.87 13	6.16 1.23 11	5.06 1.86 14	5.87 1.57 9	3.79 1.72 9
Yognon	84	$\bar{X}$ 5.83 SD 1.40 -m 3	4.46 1.21 3	5.24 1.70 3	6.20 1.34 3	4.95 1.87 3	6.05 1.39 3	3.79 1.28 3

TABLE XV e

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item  
MAGISTRATE

Role-group	N	Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 4.80 SD .98	4.90 1.22	3.30 1.36	5.20 .75	6.60 .66	5.50 1.36	3.22 .63
Dirnon	14	$\bar{X}$ 5.86 SD .92	5.64 .90	3.71 1.33	5.93 .96	5.64 1.34	5.64 .81	3.64 .90
Socate	41	$\bar{X}$ 5.20 SD 1.31	5.46 1.33	4.39 1.62	5.29 1.31	6.32 .90	5.42 1.06	3.71 1.02
Socnon	13	$\bar{X}$ 5.23 SD 1.42	5.39 1.15	3.70 1.26	5.15 1.51	6.23 1.12	5.46 1.01	3.62 1.21
Priate	27	$\bar{X}$ 5.19 SD 1.00	5.12 1.25	4.12 1.34	5.92 .83	6.08 1.00	5.39 .96	3.73 1.09
Prinon	13	$\bar{X}$ 6.54 SD .93	6.23 1.19	5.23 1.05	6.54 .63	5.54 1.28	5.77 .89	3.77 .97
Houate	93	$\bar{X}$ 5.50 SD 1.30	5.59 1.56	4.17 1.62	5.98 1.13	6.01 1.21	5.43 1.18	3.70 1.22
Hounon	35	$\bar{X}$ 5.97 SD 1.06	5.79 1.05	4.79 1.36	6.06 1.04	6.39 1.04	5.21 1.25	3.70 1.19
Yogate	427	$\bar{X}$ 3.69 SD 2.15	4.71 2.13	4.14 2.12	5.04 2.19	5.80 1.66	5.40 1.56	3.04 1.65
Yognon	84	$\bar{X}$ 5.08 SD 2.05	5.27 1.86	4.66 1.86	5.81 1.73	5.80 1.50	4.99 1.48	3.54 1.26
		-m 4	5	5	4	5	5	6

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
		(10)	(11)	(12)	(13)	(14)	(15)	(16)
Dirate	10	$\bar{X}$ 3.90 SD 1.36	5.80 .75	4.90 1.04	5.80 1.25	3.10 .94	4.70 1.00	3.78 1.32
Dirnon	14	$\bar{X}$ 3.50 SD 1.30	5.43 1.12	4.86 1.25	6.07 1.10	3.57 1.24	4.14 .92	4.00 .85
Socate	41	$\bar{X}$ 4.17 SD 1.21	5.71 .99	4.90 1.50	6.07 1.00	3.02 1.09	4.51 .99	4.24 .96
Socnon	13	$\bar{X}$ 3.39 SD 1.39	5.46 1.08	5.23 .89	6.00 1.04	3.00 1.30	4.23 1.25	4.85 .95
Priate	27	$\bar{X}$ 4.35 SD 1.36	5.54 .84	4.42 1.36	5.96 1.02	3.27 1.46	4.35 .83	4.32 1.05
Prinon	13	$\bar{X}$ 4.15 SD 1.29	5.62 .84	5.62 .92	6.31 1.07	3.15 .77	5.08 .73	4.15 .66
Houate	93	$\bar{X}$ 3.92 SD 1.52	5.46 1.21	4.78 1.62	6.07 1.12	3.01 1.30	4.64 1.15	4.24 1.03
Hounon	35	$\bar{X}$ 3.67 SD 1.51	5.70 1.03	4.97 1.40	6.42 .74	2.82 1.24	4.67 1.17	4.49 .89
Yogate	427	$\bar{X}$ 3.49 SD 1.76	5.14 1.68	4.36 2.03	5.44 1.90	2.68 1.76	3.28 1.88	4.14 1.59
Yognon	84	$\bar{X}$ 3.72 SD 1.53	5.17 1.41	4.52 1.88	5.90 1.64	2.69 1.53	3.94 1.52	4.19 1.04
		-m 5	5	5	7	6	5	5

TABLE XV F

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item  
HOUSEMASTER

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	X	5.33	4.78	4.67	4.56	6.22	3.11	3.88
		SD	.67	1.32	1.25	.96	1.03	1.10	.78
		-m	1	1	1	1	1	1	2
Dirnon	14	X	5.77	5.54	4.85	5.54	6.39	3.85	4.39
		SD	.89	1.01	.95	.84	1.08	1.29	.49
		-m	1	1	1	1	1	1	1
Socate	41	X	5.03	5.03	4.68	4.63	6.33	3.05	4.00
		SD	1.14	1.30	1.17	1.30	.99	1.00	1.03
		-m	2	1	1	1	1	1	1
Sochon	13	X	5.25	5.42	4.58	5.00	6.39	3.67	4.41
		SD	1.09	1.04	.64	.91	.84	.75	.64
		-m	1	1	1	1	0	1	1
Priate	27	X	5.46	5.44	5.08	5.38	5.35	3.08	4.50
		SD	1.04	.97	1.26	.86	1.80	.91	.82
		-m	3	4	3	3	1	3	3
Prinon	13	X	6.25	5.75	5.00	5.92	6.83	3.67	4.58
		SD	.60	1.16	.91	.49	.55	1.25	.76
		-m	1	1	1	1	1	1	1
Houate	93	X	5.74	5.41	5.02	5.50	5.85	3.40	4.62
		SD	.99	1.20	1.14	.91	1.41	1.13	.91
		-m	2	3	2	2	2	3	2
Hounon	35	X	5.42	5.42	4.91	5.39	6.24	3.73	4.49
		SD	1.10	1.44	1.14	1.28	1.50	1.05	.82
		-m	2	2	2	2	1	2	2
Yogate	427	X	5.50	5.44	5.32	5.41	5.64	3.73	4.50
		SD	1.83	1.71	1.69	1.68	2.16	1.69	1.62
		-m	27	28	26	26	25	27	29
Yognon	84	X	5.26	5.00	4.96	5.42	5.10	3.80	4.46
		SD	1.75	1.76	1.50	1.54	2.46	1.43	1.52
		-m	4	4	5	4	5	4	4

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
(1)	(2)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Dirate	10	X	4.89	3.56	5.56	5.22	3.56	4.33	4.25
		SD	1.20	1.26	.50	.92	1.07	1.33	.66
		-m	1	1	1	1	1	1	2
Dirnon	14	X	5.23	4.31	5.69	5.79	3.77	5.08	4.54
		SD	.58	.72	.99	.86	1.05	.73	.93
		-m	1	1	1	0	1	1	1
Socate	41	X	4.80	4.08	5.40	5.68	3.58	4.78	4.36
		SD	1.33	1.17	1.24	1.13	1.09	.88	.73
		-m	1	1	1	1	1	1	2
Sochon	13	X	4.58	4.17	5.33	5.67	3.42	4.83	4.75
		SD	.64	.55	1.18	1.03	.86	.80	.83
		-m	1	1	1	1	1	1	1
Priate	27	X	5.38	4.17	5.79	5.75	3.96	5.21	4.17
		SD	.90	.99	1.00	.72	1.27	.82	.55
		-m	3	3	3	3	3	3	3
Prinon	13	X	5.17	4.25	6.08	6.50	3.67	5.17	4.08
		SD	.90	.83	.76	.76	1.11	.99	.64
		-m	1	1	1	1	1	1	1
Houate	93	X	5.22	3.98	5.81	6.14	3.62	5.17	4.46
		SD	1.26	1.12	1.03	1.01	1.27	1.05	.95
		-m	2	3	3	1	3	2	1
Hounon	35	X	4.91	3.82	5.49	6.09	3.82	5.24	4.81
		SD	1.29	1.19	1.31	.93	1.11	1.30	1.10
		-m	2	2	2	2	2	2	3
Yogate	427	X	4.79	4.61	5.14	5.80	3.82	4.80	4.64
		SD	1.61	1.41	1.71	1.54	1.86	1.78	1.44
		-m	29	29	30	29	31	31	30
Yognon	84	X	4.74	4.22	5.20	6.10	3.68	4.88	3.88
		SD	1.49	1.40	1.63	1.29	1.65	1.66	1.50
		-m	4	5	4	4	5	4	4

TABLE XV 9

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item

FATHER

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	$\bar{X}$ 5.00	4.63	4.75	4.50	7.00	5.63	4.14	
		SD 1.00	1.87	1.48	1.32	.00	1.41	.83	
		-m 2	2	2	2	1	2	3	
Dirnon	14	$\bar{X}$ 6.15	5.34	4.77	5.46	6.86	4.69	4.77	
		SD .86	1.22	.89	.74	.52	1.20	.80	
		-m 1	1	1	1	0	1	1	
Socate	41	$\bar{X}$ 6.21	5.90	4.92	5.64	6.78	5.26	4.92	
		SD 1.02	1.10	1.27	1.07	.61	1.19	1.00	
		-m 2	2	2	2	1	2	2	
Socnon	13	$\bar{X}$ 5.85	5.46	4.77	5.31	6.46	4.39	4.46	
		SD 1.29	1.45	1.05	1.14	.74	1.21	.84	
		-m 0	0	0	0	0	0	0	
Priate	27	$\bar{X}$ 5.89	5.85	4.62	5.73	6.54	5.15	4.69	
		SD 1.05	.95	1.21	1.02	.84	1.13	1.02	
		-m 1	1	1	1	1	1	1	
Prinon	13	$\bar{X}$ 6.23	6.00	5.00	5.54	6.69	5.69	4.69	
		SD .97	1.36	.96	1.45	.82	.99	.99	
		-m 0	0	0	0	0	0	0	
Houate	93	$\bar{X}$ 5.92	5.58	4.74	5.77	6.84	5.17	4.84	
		SD 1.55	1.61	1.45	1.21	.50	1.28	1.26	
		-m 5	5	5	5	2	5	5	
Hounon	35	$\bar{X}$ 6.24	5.76	4.91	6.06	6.85	4.76	4.97	
		SD 1.23	1.48	1.14	.98	.49	1.28	1.11	
		-m 2	2	2	2	1	2	2	
Yogate	427	$\bar{X}$ 5.60	5.98	5.31	5.43	6.70	4.50	4.80	
		SD 2.07	1.66	1.91	1.82	1.12	1.60	1.79	
		-m 22	19	20	21	21	19	19	
Yognon	84	$\bar{X}$ 5.96	5.88	5.41	5.64	6.86	4.48	4.70	
		SD 1.83	1.65	1.82	1.81	.77	1.57	1.71	
		-m 1	1	1	1	3	2	1	

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Dirate	10	$\bar{X}$ 4.38	3.63	4.63	5.50	4.63	5.00	4.71	
		SD 1.41	1.22	1.65	1.00	1.32	1.00	1.28	
		-m 2	2	2	2	2	2	3	
Dirnon	14	$\bar{X}$ 5.15	4.23	5.08	6.08	3.92	5.62	4.85	
		SD .95	.97	1.27	.92	1.07	.92	.95	
		-m 1	1	1	1	1	1	1	
Socate	41	$\bar{X}$ 5.85	4.33	5.44	6.15	4.44	5.72	4.59	
		SD 1.00	1.14	1.39	.98	1.63	1.06	1.14	
		-m 2	2	2	2	2	2	2	
Socnon	13	$\bar{X}$ 5.31	4.08	5.15	5.54	4.62	5.39	5.00	
		SD 1.20	.83	1.17	1.22	1.21	1.08	1.30	
		-m 0	0	0	0	0	0	0	
Priate	27	$\bar{X}$ 5.35	4.46	5.46	5.77	4.39	5.58	4.42	
		SD 1.19	.97	1.22	1.05	1.00	.89	1.25	
		-m 1	1	1	1	1	1	1	
Prinon	13	$\bar{X}$ 5.69	4.23	5.69	6.39	4.15	5.92	4.46	
		SD 1.14	1.48	1.14	1.08	1.35	1.14	.93	
		-m 0	0	0	0	0	0	0	
Houate	93	$\bar{X}$ 5.42	4.21	5.39	6.10	3.99	5.50	4.89	
		SD 1.39	1.37	1.38	1.05	1.56	1.29	1.19	
		-m 5	5	5	6	6	5	5	
Hounon	35	$\bar{X}$ 5.64	4.27	5.18	6.21	4.36	5.94	4.58	
		SD 1.41	1.02	1.81	1.15	1.43	.98	1.33	
		-m 2	2	2	2	2	2	2	
Yogate	427	$\bar{X}$ 5.05	4.63	5.05	5.62	3.90	5.17	4.86	
		SD 1.72	1.41	1.82	1.62	2.03	1.86	1.68	
		-m 22	23	24	20	20	20	20	
Yognon	84	$\bar{X}$ 5.11	4.61	5.07	5.53	3.94	5.48	4.64	
		SD 1.71	1.38	1.74	1.77	1.83	1.75	1.60	
		-m 1	1	1	1	1	1	1	

TABLE XV h

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item I - MYSELF

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 5.00 SD .45 -m 0	4.80 .40 0	4.50 1.43 0	4.80 .60 0	5.00 .78 0	4.44 .50 1	5.20 .87 1
Dirnon	14	$\bar{X}$ 5.15 SD .95 -m 1	5.15 .95 1	5.00 1.04 1	5.15 .66 1	6.31 1.64 1	4.92 1.39 1	4.69 .72 1
Socate	41	$\bar{X}$ 5.45 SD 1.12 -m 1	5.37 .93 0	4.90 1.28 0	4.95 .96 0	6.70 .74 0	3.59 1.38 0	4.59 .91 0
Socnon	13	$\bar{X}$ 5.42 SD 1.04 -m 1	5.50 .87 1	5.42 .95 1	5.17 .69 1	6.69 .46 0	4.00 1.23 1	4.58 .86 1
Priate	27	$\bar{X}$ 5.28 SD .92 -m 2	5.32 .93 2	5.36 .79 2	5.04 .82 2	6.62 .88 1	4.16 .97 2	4.56 .70 2
Prinon	13	$\bar{X}$ 5.85 SD 1.03 -m 0	5.85 .66 0	5.23 .80 0	5.54 .63 0	7.00 .00 0	3.92 1.14 0	4.85 .77 0
Houate	93	$\bar{X}$ 5.41 SD 1.07 -m 1	5.27 1.16 3	5.00 1.23 2	5.16 .94 3	6.67 1.01 1	3.53 1.49 1	4.62 .98 1
Hounon	35	$\bar{X}$ 5.40 SD 1.05 -m 0	5.00 1.33 0	4.83 1.30 0	4.89 .85 0	6.57 1.42 0	3.37 1.38 0	4.74 .87 0
Yogate	427	$\bar{X}$ 4.44 SD 2.10 -m 19	4.93 1.66 15	5.17 1.62 17	4.33 1.88 17	6.68 1.10 17	1.59 1.00 17	4.71 1.57 18
Yognon	84	$\bar{X}$ 4.99 SD 1.59 -m 2	5.15 1.35 2	5.83 1.39 3	4.88 1.56 2	6.85 .76 3	1.77 1.28 2	5.02 1.30 2

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 5.20 SD .87 -m 0	4.30 1.42 0	5.30 .64 0	5.70 .90 0	4.30 .64 0	4.70 .64 0	5.00 .94 1
Dirnon	14	$\bar{X}$ 5.62 SD 1.00 -m 1	4.23 .69 1	5.62 1.00 1	6.23 .97 1	4.39 1.21 1	4.77 1.42 1	4.85 1.41 1
Socate	41	$\bar{X}$ 5.59 SD .99 -m 0	4.24 1.54 0	5.68 1.00 0	6.07 1.02 0	4.63 1.16 0	4.98 1.16 0	4.32 1.26 0
Socnon	13	$\bar{X}$ 5.75 SD 1.01 -m 1	4.50 .95 1	5.58 1.04 1	5.92 .86 1	5.08 1.04 1	5.42 .64 1	4.17 1.63 1
Priate	27	$\bar{X}$ 5.68 SD .88 -m 2	4.24 .91 2	5.40 .98 2	6.08 .63 2	4.60 1.23 2	4.76 .71 2	4.40 1.13 2
Prinon	13	$\bar{X}$ 5.85 SD .86 -m 0	3.62 1.15 0	5.85 .77 0	6.77 .58 0	4.30 1.32 0	5.23 .89 0	4.15 1.03 0
Houate	93	$\bar{X}$ 5.70 SD .99 -m 1	3.78 1.41 1	5.39 1.17 1	6.21 1.06 1	4.14 1.48 3	4.99 1.11 2	4.62 1.49 1
Hounon	35	$\bar{X}$ 5.28 SD .97 -m 0	3.80 1.56 0	5.40 1.38 0	6.23 .93 0	4.40 1.24 0	5.00 .83 0	4.31 1.41 0
Yogate	427	$\bar{X}$ 4.96 SD 1.62 -m 17	3.83 1.69 19	5.13 1.75 17	5.45 1.73 20	4.34 1.83 15	4.92 1.73 16	3.82 1.82 16
Yognon	84	$\bar{X}$ 5.39 SD 1.38 -m 4	3.99 1.45 3	5.46 1.58 3	5.71 1.57 2	4.21 1.69 2	5.26 1.51 3	3.76 1.64 1

TABLE XV i

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item ORPHANAGE

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	$\bar{X}$ 4.11 SD 1.52 -m 1	4.67 .82 1	3.44 .69 1	4.22 .63 1	3.44 1.17 1	3.78 1.59 1	3.63 .48 2	
Dirnon	14	$\bar{X}$ 4.69 SD 1.73 -m 1	5.08 1.39 1	4.00 .88 1	4.62 1.28 1	3.85 .66 1	3.08 1.77 1	3.92 .92 1	
Socate	41	$\bar{X}$ 3.54 SD 1.16 -m 2	4.18 1.60 2	3.39 1.05 2	3.87 1.44 2	3.95 .94 3	3.39 1.66 2	3.87 1.22 2	
Socnon	13	$\bar{X}$ 4.39 SD 1.60 -m 0	4.77 1.19 0	3.69 1.14 0	4.46 .93 0	3.85 1.02 0	3.92 1.39 0	4.23 .97 0	
Priate	27	$\bar{X}$ 4.21 SD 1.68 -m 3	4.33 1.46 3	3.75 1.16 3	4.46 1.15 3	3.88 .88 3	3.83 1.65 3	3.92 1.12 3	
Prinon	13	$\bar{X}$ 5.92 SD 1.14 -m 0	4.92 1.14 0	4.15 .66 0	5.23 .97 0	3.85 .66 0	3.00 1.41 0	4.46 1.15 0	
Houate	93	$\bar{X}$ 4.89 SD 1.84 -m 6	4.66 1.60 7	3.84 1.29 8	4.92 1.38 7	4.13 1.10 9	3.45 1.64 7	4.26 1.44 8	
Hounon	35	$\bar{X}$ 5.03 SD 1.60 -m 4	4.87 1.60 4	4.32 1.33 4	5.36 1.18 4	3.87 1.36 4	3.40 1.72 5	4.30 1.24 5	
Yogate	427	$\bar{X}$ 4.67 SD 2.19 -m 56	4.57 1.91 57	4.28 1.81 59	4.89 1.89 63	4.17 1.68 57	3.45 1.80 61	4.47 1.71 59	
Yognon	84	$\bar{X}$ 5.17 SD 1.98 -m 6	4.82 1.72 7	4.52 1.56 9	5.20 1.76 7	4.40 1.53 8	3.66 1.80 7	4.31 1.61 7	

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
(10)	(11)	(12)	(13)	(14)	(15)	(16)			
Dirate	10	$\bar{X}$ 3.67 SD 1.05 -m 1	2.78 .79 1	3.89 1.29 1	5.33 .94 1	3.78 .79 1	4.33 1.05 1	4.88 .60 2	
Dirnon	14	$\bar{X}$ 4.46 SD 1.39 -m 1	2.85 1.10 1	4.77 1.53 1	6.00 .96 1	3.77 1.05 1	4.62 1.34 1	4.69 1.49 1	
Socate	41	$\bar{X}$ 3.92 SD 1.62 -m 2	2.74 1.08 2	3.80 1.56 2	5.21 1.34 2	3.56 1.32 2	3.76 1.55 3	5.24 1.27 3	
Socnon	13	$\bar{X}$ 4.15 SD 1.46 -m 0	3.46 1.15 0	4.15 1.51 0	5.15 1.56 0	3.46 1.28 0	4.31 1.07 0	5.15 1.35 0	
Priate	27	$\bar{X}$ 3.71 SD 1.46 -m 3	2.67 1.07 3	3.71 1.49 1	5.46 1.12 3	3.75 1.45 3	3.75 1.64 3	4.58 1.53 3	
Prinon	13	$\bar{X}$ 5.00 SD 1.52 -m 0	3.39 .74 0	5.23 1.80 0	6.39 1.00 0	4.23 1.37 0	4.85 1.17 0	4.85 1.35 0	
Houate	93	$\bar{X}$ 4.47 SD 1.77 -m 6	3.17 1.42 7	4.58 1.65 7	5.59 1.30 7	3.80 1.52 6	4.66 1.50 6	4.24 1.67 6	
Hounon	35	$\bar{X}$ 4.74 SD 1.97 -m 4	3.45 1.41 4	4.80 1.62 5	6.13 1.21 4	3.77 1.40 4	4.65 1.56 4	4.81 1.82 4	
Yogate	427	$\bar{X}$ 4.48 SD 1.79 -m 61	3.82 1.71 58	4.51 1.83 63	5.17 1.85 63	4.21 1.86 62	4.48 1.91 61	4.34 1.66 62	
Yognon	84	$\bar{X}$ 4.60 SD 1.75 -m 7	3.57 1.69 8	4.80 1.65 8	5.39 1.83 7	3.73 1.76 7	4.42 1.87 7	4.75 1.69 8	

TABLE XV j

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) For Role-group Responses to Semantic Differential Scales with Stimulus Item PRIME MINISTER [ Mr. W.E. ROWLING ]

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Dirate	(10)	$\bar{X}$ 5.50 SD .80 -m 0	4.70 1.55 0	4.20 1.25 0	5.10 .54 0	6.60 .66 0	4.50 1.03 0	4.44 .50 1
Dirnon	14	$\bar{X}$ 5.07 SD 1.39 -m 0	4.29 1.53 0	3.79 1.08 0	5.00 1.36 0	6.71 .70 0	4.29 1.44 0	4.64 .89 0
Socate	41	$\bar{X}$ 4.90 SD 1.28 -m 0	4.24 1.65 0	3.95 .96 0	4.63 1.21 0	6.56 .86 0	3.81 1.17 0	4.51 1.09 0
Socnon	13	$\bar{X}$ 5.33 SD 1.03 -m 1	5.00 1.35 2	4.08 .86 1	5.08 .95 1	6.69 .72 0	3.92 1.12 1	4.75 .92 1
Priate	27	$\bar{X}$ 5.27 SD 1.46 -m 1	4.42 1.71 1	4.07 1.47 1	5.23 1.28 1	6.42 1.12 1	3.88 1.28 2	4.73 1.29 1
Prinon	13	$\bar{X}$ 4.92 SD 1.49 -m 0	4.00 1.57 0	3.77 1.31 0	5.08 .73 0	7.00 .00 0	4.54 .84 0	4.39 .84 0
Houate	93	$\bar{X}$ 4.93 SD 1.36 -m 2	4.10 1.74 4	3.81 1.29 2	4.74 1.32 2	6.49 1.12 2	4.12 1.08 2	4.56 1.00 2
Hounon	35	$\bar{X}$ 4.89 SD 1.30 -m 0	3.89 1.62 0	3.91 1.42 0	4.71 1.47 0	6.80 .69 0	3.91 .97 0	4.17 1.06 0
Yogate	427	$\bar{X}$ 4.85 SD 1.85 -m 56	4.67 1.78 55	4.18 1.73 58	5.41 1.74 57	6.70 1.01 56	4.86 1.36 59	4.05 1.44 56
Yognon	84	$\bar{X}$ 4.95 SD 1.72 -m 2	4.48 1.49 3	4.35 1.46 3	5.59 1.61 4	6.52 1.40 3	4.75 1.39 3	4.06 1.28 3

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
		[10]	[11]	[12]	[13]	[14]	[15]	[16]
Dirate	10	$\bar{X}$ 5.20 SD .60 -m 0	5.00 .63 0	5.20 .87 0	6.30 .90 0	4.00 .89 0	5.10 .70 0	3.44 .96 1
Dirnon	14	$\bar{X}$ 4.86 SD 1.06 -m 0	4.79 .77 0	4.64 1.67 0	6.57 .90 0	4.36 1.23 0	5.57 .98 0	3.29 1.10 0
Socate	41	$\bar{X}$ 5.00 SD 1.40 -m 0	5.32 .97 0	4.93 1.72 0	6.17 1.12 0	4.20 1.31 0	5.20 1.09 0	3.39 1.21 0
Socnon	13	$\bar{X}$ 5.25 SD 1.01 -m 1	4.75 .92 1	4.75 1.64 1	6.33 .94 1	4.66 1.03 1	5.08 1.26 1	3.67 1.11 1
Priate	27	$\bar{X}$ 5.04 SD 1.43 -m 1	4.96 1.16 1	4.86 1.31 1	6.39 .68 1	4.19 1.49 1	5.54 1.08 1	3.50 1.08 1
Prinon	13	$\bar{X}$ 5.08 SD 1.27 -m 0	5.08 1.07 0	4.54 1.87 0	6.62 .84 0	4.00 1.11 0	5.39 1.27 0	3.46 .84 0
Houate	93	$\bar{X}$ 4.90 SD 1.31 -m 2	5.24 1.14 2	4.71 1.71 2	6.15 1.06 2	4.28 1.53 2	5.22 1.14 2	3.22 1.17 2
Hounon	35	$\bar{X}$ 4.69 SD 1.06 -m 0	5.06 1.04 0	4.83 1.77 0	6.31 .95 0	4.40 1.18 0	5.20 .95 0	3.31 1.33 0
Yogate	427	$\bar{X}$ 4.51 SD 1.48 -m 54	5.73 1.30 56	5.04 1.70 61	6.17 1.36 55	3.76 1.65 55	4.75 1.63 57	4.22 1.47 55
Yognon	84	$\bar{X}$ 4.70 SD 1.35 -m 3	5.68 1.31 3	4.79 1.55 3	6.20 1.28 4	3.63 1.61 3	5.00 1.80 3	4.17 1.49 3

TABLE XV k

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] For Role-group Responses to Semantic Differential Scales with Stimulus Item

POLICEMAN

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 5.40 SD .80 -m 0	5.60 .66 0	3.60 1.20 0	4.60 .66 0	6.30 .78 0	2.90 .83 0	3.67 .67 1
Dirnon	14	$\bar{X}$ 5.54 SD 1.08 -m 1	5.92 1.00 1	4.54 1.28 1	4.69 1.14 1	5.50 1.40 0	3.54 1.22 1	3.85 .66 1
Socate	41	$\bar{X}$ 5.37 SD 1.16 -m 0	5.81 1.11 0	4.76 1.38 0	4.39 1.12 0	5.63 1.41 0	3.42 .73 0	3.81 .77 0
Socnon	13	$\bar{X}$ 5.42 SD .95 -m 1	5.50 1.86 1	4.17 1.28 1	4.58 1.86 1	6.00 1.00 1	3.92 .76 1	4.25 .72 1
Priate	27	$\bar{X}$ 5.56 SD .98 -m 2	5.72 .67 2	4.60 1.02 2	4.96 .72 2	5.88 1.21 2	3.20 1.10 2	3.96 .77 2
Prinon	13	$\bar{X}$ 6.31 SD .82 -m 0	6.46 .63 0	5.39 1.00 0	5.54 .84 0	5.77 1.37 0	3.77 .80 0	3.69 .72 0
Houate	93	$\bar{X}$ 5.88 SD .99 -m 2	5.96 1.05 2	5.10 1.48 3	5.40 1.04 2	6.17 1.16 2	3.35 1.16 2	3.99 .92 2
Hounon	35	$\bar{X}$ 5.82 SD 1.09 -m 2	5.88 1.07 2	5.19 1.29 3	5.18 1.06 2	6.24 1.37 2	3.30 .90 2	3.73 .99 2
Yogate	427	$\bar{X}$ 3.74 SD 2.27 -m 11	5.07 2.17 10	4.97 2.15 10	4.58 2.17 14	5.68 1.75 11	3.75 1.55 10	3.08 1.58 9
Yognon	84	$\bar{X}$ 5.22 SD 2.12 -m 2	6.00 1.55 3	5.62 1.67 2	5.62 1.66 2	6.02 1.39 2	3.56 1.22 2	3.74 1.47 3

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 4.10 SD .83 -m 0	4.10 .83 0	5.40 1.20 0	5.20 .75 0	3.10 .70 0	4.40 .80 0	5.60 .80 0
Dirnon	14	$\bar{X}$ 4.23 SD .97 -m 1	4.31 .72 1	6.00 .96 1	6.00 1.07 0	2.62 .83 1	4.62 1.00 1	5.62 1.15 1
Socate	41	$\bar{X}$ 4.00 SD 1.29 -m 0	4.17 .85 0	5.63 1.25 0	5.71 1.13 0	2.81 .92 0	4.51 1.09 0	5.39 1.03 0
Socnon	13	$\bar{X}$ 4.25 SD 1.09 -m 1	3.83 .90 1	5.50 .65 1	5.17 .69 1	3.17 1.07 1	4.33 .94 1	5.42 1.19 1
Priate	27	$\bar{X}$ 4.44 SD 1.17 -m 2	4.28 .78 2	5.40 1.10 2	5.80 .89 2	3.08 .98 2	4.76 1.14 2	5.60 .89 2
Prinon	13	$\bar{X}$ 4.39 SD 1.00 -m 0	4.62 .63 0	6.00 1.11 0	6.23 .89 0	3.08 .97 0	5.23 .97 0	5.39 1.15 0
Houate	93	$\bar{X}$ 4.28 SD 1.28 -m 2	4.15 1.06 2	5.78 1.14 2	5.87 1.11 2	2.90 1.14 2	4.77 1.04 2	5.51 1.10 2
Hounon	35	$\bar{X}$ 3.79 SD 1.07 -m 2	4.36 1.07 2	5.88 .95 2	5.91 1.08 2	2.94 1.37 2	4.79 1.12 2	5.49 1.33 2
Yogate	427	$\bar{X}$ 3.56 SD 1.78 -m 11	4.32 1.51 13	5.07 1.97 11	5.06 2.07 12	2.52 1.72 11	3.19 1.91 11	4.83 1.71 11
Yognon	84	$\bar{X}$ 4.06 SD 1.62 -m 2	4.68 1.14 2	5.52 1.48 3	5.92 1.31 2	2.51 1.71 2	4.11 1.72 2	5.15 1.57 2

TABLE XV 1

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item FRIEND

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 5.80 SD .75 -m 0	$\bar{X}$ 5.30 SD .78 -m 0	$\bar{X}$ 4.90 SD .94 -m 0	$\bar{X}$ 5.10 SD .83 -m 0	$\bar{X}$ 4.50 SD 2.16 -m 0	$\bar{X}$ 3.80 SD .98 -m 0	$\bar{X}$ 4.89 SD .57 -m 1
Dirnon	14	$\bar{X}$ 6.21 SD 1.01 -m 0	$\bar{X}$ 5.57 SD .98 -m 0	$\bar{X}$ 4.57 SD .62 -m 0	$\bar{X}$ 5.71 SD .88 -m 0	$\bar{X}$ 4.21 SD 1.78 -m 0	$\bar{X}$ 4.50 SD .91 -m 0	$\bar{X}$ 5.14 SD .83 -m 0
Socate	41	$\bar{X}$ 6.69 SD .51 -m 2	$\bar{X}$ 6.03 SD .86 -m 2	$\bar{X}$ 4.82 SD 1.15 -m 2	$\bar{X}$ 5.54 SD .93 -m 2	$\bar{X}$ 4.59 SD 1.64 -m 2	$\bar{X}$ 3.72 SD .96 -m 2	$\bar{X}$ 5.31 SD 1.02 -m 2
Socnon	13	$\bar{X}$ 6.50 SD .65 -m 1	$\bar{X}$ 5.75 SD 1.09 -m 1	$\bar{X}$ 4.42 SD .95 -m 1	$\bar{X}$ 5.50 SD .76 -m 1	$\bar{X}$ 4.75 SD 1.23 -m 1	$\bar{X}$ 4.00 SD .58 -m 1	$\bar{X}$ 5.17 SD .55 -m 1
Priate	27	$\bar{X}$ 6.50 SD .57 -m 1	$\bar{X}$ 5.54 SD 1.12 -m 1	$\bar{X}$ 4.42 SD 1.04 -m 1	$\bar{X}$ 5.62 SD .89 -m 1	$\bar{X}$ 4.92 SD 1.64 -m 1	$\bar{X}$ 4.12 SD .85 -m 1	$\bar{X}$ 4.96 SD .76 -m 1
Prinon	13	$\bar{X}$ 6.77 SD .58 -m 0	$\bar{X}$ 5.77 SD .97 -m 0	$\bar{X}$ 4.46 SD .93 -m 0	$\bar{X}$ 5.77 SD .89 -m 0	$\bar{X}$ 5.15 SD 1.70 -m 0	$\bar{X}$ 4.39 SD .84 -m 0	$\bar{X}$ 5.15 SD 1.23 -m 0
Houate	93	$\bar{X}$ 6.52 SD .75 -m 4	$\bar{X}$ 5.54 SD 1.28 -m 3	$\bar{X}$ 4.76 SD 1.33 -m 4	$\bar{X}$ 5.60 SD 1.04 -m 3	$\bar{X}$ 4.52 SD 1.98 -m 4	$\bar{X}$ 3.54 SD 1.16 -m 3	$\bar{X}$ 5.20 SD 1.05 -m 3
Hounon	35	$\bar{X}$ 6.66 SD .58 -m 0	$\bar{X}$ 5.91 SD 1.05 -m 0	$\bar{X}$ 4.91 SD 1.23 -m 0	$\bar{X}$ 5.57 SD 1.10 -m 0	$\bar{X}$ 3.63 SD 2.21 -m 0	$\bar{X}$ 3.57 SD 1.25 -m 0	$\bar{X}$ 5.27 SD .95 -m 1
Yogate	427	$\bar{X}$ 6.27 SD 1.35 -m 14	$\bar{X}$ 5.50 SD 1.49 -m 18	$\bar{X}$ 5.56 SD 1.50 -m 19	$\bar{X}$ 4.92 SD 1.74 -m 21	$\bar{X}$ 4.52 SD 2.49 -m 19	$\bar{X}$ 1.81 SD 1.17 -m 18	$\bar{X}$ 5.19 SD 1.52 -m 17
Yognon	84	$\bar{X}$ 6.51 SD 1.01 -m 1	$\bar{X}$ 5.47 SD 1.42 -m 1	$\bar{X}$ 5.45 SD 1.48 -m 1	$\bar{X}$ 5.29 SD 1.56 -m 1	$\bar{X}$ 4.34 SD 2.70 -m 1	$\bar{X}$ 1.70 SD .93 -m 1	$\bar{X}$ 5.28 SD 1.37 -m 1

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
		(10)	(11)	(12)	(13)	(14)	(15)	(16)
Dirate	10	$\bar{X}$ 5.30 SD .78 -m 0	$\bar{X}$ 4.00 SD 1.09 -m 0	$\bar{X}$ 5.20 SD .87 -m 0	$\bar{X}$ 5.80 SD .98 -m 0	$\bar{X}$ 4.40 SD 1.11 -m 0	$\bar{X}$ 5.20 SD 1.25 -m 0	$\bar{X}$ 3.89 SD 1.29 -m 1
Dirnon	14	$\bar{X}$ 6.14 SD .92 -m 0	$\bar{X}$ 4.07 SD .46 -m 0	$\bar{X}$ 5.64 SD 1.11 -m 0	$\bar{X}$ 5.79 SD 1.21 -m 0	$\bar{X}$ 4.36 SD .61 -m 0	$\bar{X}$ 5.71 SD 1.10 -m 0	$\bar{X}$ 3.93 SD 1.03 -m 0
Socate	41	$\bar{X}$ 6.08 SD .97 -m 2	$\bar{X}$ 4.44 SD .98 -m 2	$\bar{X}$ 5.44 SD 1.24 -m 2	$\bar{X}$ 6.05 SD .99 -m 2	$\bar{X}$ 4.77 SD 1.29 -m 2	$\bar{X}$ 6.03 SD .83 -m 2	$\bar{X}$ 4.21 SD .88 -m 2
Socnon	13	$\bar{X}$ 5.92 SD .76 -m 1	$\bar{X}$ 4.42 SD .95 -m 1	$\bar{X}$ 5.33 SD 1.18 -m 1	$\bar{X}$ 5.42 SD 1.19 -m 1	$\bar{X}$ 5.08 SD .95 -m 1	$\bar{X}$ 6.17 SD .69 -m 1	$\bar{X}$ 4.92 SD 1.12 -m 1
Priate	27	$\bar{X}$ 6.12 SD .80 -m 1	$\bar{X}$ 4.35 SD .55 -m 1	$\bar{X}$ 5.23 SD .97 -m 1	$\bar{X}$ 6.00 SD .83 -m 1	$\bar{X}$ 4.31 SD 1.07 -m 1	$\bar{X}$ 5.69 SD .91 -m 1	$\bar{X}$ 4.15 SD .91 -m 1
Prinon	13	$\bar{X}$ 6.00 SD 1.36 -m 0	$\bar{X}$ 4.39 SD 1.00 -m 0	$\bar{X}$ 5.46 SD .84 -m 0	$\bar{X}$ 6.31 SD 1.49 -m 0	$\bar{X}$ 4.69 SD 1.14 -m 0	$\bar{X}$ 6.46 SD .63 -m 0	$\bar{X}$ 4.00 SD 1.36 -m 0
Houate	93	$\bar{X}$ 5.84 SD .91 -m 4	$\bar{X}$ 4.30 SD 1.07 -m 3	$\bar{X}$ 5.22 SD 1.22 -m 3	$\bar{X}$ 6.11 SD 1.11 -m 3	$\bar{X}$ 4.47 SD 1.30 -m 3	$\bar{X}$ 5.86 SD 1.05 -m 3	$\bar{X}$ 4.13 SD 1.28 -m 3
Hounon	35	$\bar{X}$ 5.80 SD 1.06 -m 0	$\bar{X}$ 4.06 SD 1.15 -m 0	$\bar{X}$ 5.49 SD 1.23 -m 0	$\bar{X}$ 6.20 SD 1.04 -m 0	$\bar{X}$ 4.37 SD 1.22 -m 0	$\bar{X}$ 6.09 SD 1.10 -m 0	$\bar{X}$ 3.89 SD 1.12 -m 0
Yogate	427	$\bar{X}$ 5.24 SD 1.57 -m 19	$\bar{X}$ 4.15 SD 1.38 -m 20	$\bar{X}$ 5.28 SD 1.71 -m 19	$\bar{X}$ 5.32 SD 1.75 -m 20	$\bar{X}$ 4.34 SD 1.83 -m 19	$\bar{X}$ 5.59 SD 1.55 -m 19	$\bar{X}$ 4.07 SD 1.68 -m 19
Yognon	84	$\bar{X}$ 5.36 SD 1.44 -m 1	$\bar{X}$ 4.40 SD 1.29 -m 1	$\bar{X}$ 5.39 SD 1.54 -m 1	$\bar{X}$ 5.78 SD 1.63 -m 1	$\bar{X}$ 4.24 SD 1.84 -m 1	$\bar{X}$ 6.22 SD 1.15 -m 1	$\bar{X}$ 3.80 SD 1.52 -m 1

TABLE XV m

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item SOCIAL WORKER

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 5.30 SD .64	4.80 1.08	4.20 .98	4.70 1.10	4.00 .89	3.60 1.20	4.33 .82
Dirnon	14	$\bar{X}$ 6.00 SD .68	5.46 .84	4.46 1.08	5.54 .63	3.39 1.15	4.15 1.17	4.77 .80
Socate	41	$\bar{X}$ 5.66 SD 1.14	5.39 1.19	4.54 1.21	5.40 .92	4.15 1.16	3.71 .51	4.61 .73
Socnon	13	$\bar{X}$ 5.58 SD .95	5.33 .85	4.83 .97	5.58 .76	4.58 1.12	4.00 .41	4.67 .62
Priate	27	$\bar{X}$ 5.76 SD .95	4.68 1.62	4.04 1.43	5.24 1.07	3.92 1.20	3.40 .94	4.72 .72
Prinon	13	$\bar{X}$ 5.92 SD 1.38	5.50 1.32	4.25 1.23	5.50 .96	4.17 1.52	4.08 .76	4.50 .76
Houate	93	$\bar{X}$ 5.50 SD 1.26	4.96 1.38	4.23 1.42	5.22 1.20	3.96 1.61	3.47 1.27	4.67 1.01
Hounon	35	$\bar{X}$ 5.59 SD 1.48	5.09 1.47	4.59 1.41	5.34 1.45	3.63 2.06	3.53 1.06	4.72 1.10
Yogate	427	$\bar{X}$ 5.23 SD 2.04	4.53 1.87	4.40 1.95	5.24 1.78	4.38 2.50	3.67 1.67	4.53 1.74
Yognon	84	$\bar{X}$ 5.35 SD 1.74	4.65 1.66	4.65 1.56	5.52 1.61	4.59 2.26	3.78 1.42	4.62 1.49

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 5.30 SD .90	3.50 1.03	5.30 .90	5.60 .80	4.70 .78	4.90 .83	4.00 .47
Dirnon	14	$\bar{X}$ 5.92 SD .62	4.23 .80	6.00 .78	6.39 .84	4.23 .97	5.31 .82	4.23 .42
Socate	41	$\bar{X}$ 5.85 SD .98	3.85 1.26	5.37 1.26	5.73 1.15	4.43 1.02	5.34 .93	4.02 .35
Socnon	13	$\bar{X}$ 5.75 SD .72	4.33 1.03	5.67 .94	5.83 1.07	4.50 .76	5.42 .86	4.67 1.11
Priate	27	$\bar{X}$ 5.48 SD .94	4.44 .64	4.56 1.55	5.96 .87	4.56 1.06	5.46 .80	4.16 .67
Prinon	13	$\bar{X}$ 5.50 SD 1.19	3.83 .80	5.00 1.47	6.33 .94	4.50 1.19	5.58 .86	3.92 1.26
Houate	93	$\bar{X}$ 5.28 SD 1.29	4.29 .87	5.02 1.57	6.08 1.02	4.34 1.23	5.23 1.06	4.04 .71
Hounon	35	$\bar{X}$ 5.44 SD 1.35	4.53 .79	5.50 1.32	6.28 .94	4.25 1.46	5.34 1.49	4.03 .73
Yogate	427	$\bar{X}$ 4.67 SD 1.65	4.71 1.33	4.71 1.79	5.88 1.45	4.25 1.85	4.98 1.82	3.95 1.47
Yognon	84	$\bar{X}$ 4.92 SD 1.49	4.52 1.18	4.95 1.59	5.74 1.59	4.01 1.63	5.28 1.53	4.16 1.07

TABLE XV n  
 Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of  
 Missing Observations [-m] for Role-group Responses to  
 Semantic Differential Scales with Stimulus Item  
 PAKEHA

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	$\bar{X}$	4.60	4.40	4.00	4.20	4.20	4.00	4.00
		SD	1.20	.49	.89	.40	.40	.00	.63
		-m	5	5	5	5	5	5	5
Dirnon	14	$\bar{X}$	4.71	4.14	4.29	4.86	4.29	4.14	4.00
		SD	.88	.83	.70	.83	.70	.35	.54
		-m	7	7	7	7	7	7	7
Socate	41	$\bar{X}$	4.89	4.78	4.74	4.52	4.26	3.93	4.11
		SD	1.18	1.23	.80	.79	.80	.38	.63
		-m	13	14	14	14	14	14	14
Soconon	13	$\bar{X}$	5.00	4.40	4.40	4.70	4.50	3.90	4.10
		SD	1.10	.66	.66	.64	.92	.54	.54
		-m	3	3	3	3	3	3	3
Priate	27	$\bar{X}$	5.31	5.08	4.67	4.82	3.75	4.33	4.67
		SD	.82	.86	.94	.94	.92	.85	1.11
		-m	14	15	15	16	15	15	15
Prinon	13	$\bar{X}$	5.33	4.56	5.00	4.78	4.67	3.78	4.22
		SD	1.16	.96	.82	.79	1.25	.42	.63
		-m	4	4	4	4	4	4	4
Houate	93	$\bar{X}$	5.23	4.79	4.45	4.69	4.33	3.81	4.28
		SD	1.13	1.23	1.16	1.04	1.40	.97	1.15
		-m	28	29	29	28	29	29	29
Hounon	35	$\bar{X}$	5.10	4.69	4.69	4.66	4.66	3.62	4.31
		SD	1.27	1.29	1.09	1.24	1.63	.96	1.12
		-m	6	6	6	6	6	6	6
Yogate	427	$\bar{X}$	4.80	4.22	4.41	4.59	4.32	3.13	4.29
		SD	1.93	1.86	2.88	2.83	2.09	1.51	1.61
		-m	65	74	77	75	74	75	73
Yognon	84	$\bar{X}$	5.15	4.37	4.53	4.51	3.97	3.11	4.62
		SD	1.76	1.75	1.72	1.89	2.03	1.47	1.55
		-m	12	14	12	13	15	14	13

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
(1)	(2)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Dirate	10	$\bar{X}$	4.00	4.20	4.60	4.40	3.60	4.00	4.20
		SD	1.41	.75	1.50	.50	.49	.00	.40
		-m	5	5	5	5	5	5	5
Dirnon	14	$\bar{X}$	4.13	4.50	4.86	5.00	3.29	4.29	4.00
		SD	.64	.70	.99	.93	.70	.88	.00
		-m	7	6	7	7	7	7	7
Socate	41	$\bar{X}$	4.44	4.48	4.52	4.89	4.00	4.22	4.22
		SD	.96	1.03	1.26	.99	.86	.69	.42
		-m	14	14	14	14	14	14	14
Soconon	13	$\bar{X}$	3.70	4.60	4.70	5.00	3.50	4.90	4.40
		SD	.90	.80	1.01	.45	1.03	.70	.92
		-m	3	3	3	3	3	3	3
Priate	27	$\bar{X}$	4.58	4.67	4.75	5.17	3.75	4.75	3.55
		SD	1.44	.85	.92	.99	1.30	1.09	.89
		-m	15	15	15	15	15	15	16
Prinon	13	$\bar{X}$	4.44	4.11	4.11	5.80	4.56	4.78	4.11
		SD	1.17	.74	1.66	.87	.96	.92	.31
		-m	4	4	4	3	4	4	4
Houate	93	$\bar{X}$	4.39	4.72	4.80	5.29	3.80	4.54	4.27
		SD	1.33	.78	1.21	1.12	1.11	1.08	.80
		-m	29	29	28	28	28	30	29
Hounon	35	$\bar{X}$	4.41	4.55	4.69	5.03	3.52	4.72	4.38
		SD	1.16	.81	1.34	1.13	.90	1.05	.67
		-m	6	6	6	6	6	6	6
Yogate	427	$\bar{X}$	4.50	4.58	4.59	5.02	4.16	4.61	4.02
		SD	1.63	1.55	1.74	1.86	1.76	1.79	1.50
		-m	74	75	76	73	75	73	73
Yognon	84	$\bar{X}$	4.73	4.72	4.39	5.27	4.18	5.10	3.93
		SD	1.50	1.38	1.52	1.52	1.67	1.45	1.24
		-m	13	13	13	13	13	13	13

TABLE XV o

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item A POOR PERSON

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 4.22 SD .42 -m 1	2.78 .42 1	2.89 .56 1	3.22 .42 1	3.89 .99 1	4.67 .67 1	3.38 .70 2
Dirnon	14	$\bar{X}$ 4.73 SD .86 -m 3	3.27 .62 3	3.27 .86 3	4.09 .90 3	4.00 .43 3	4.46 .78 3	4.09 .79 3
Socate	41	$\bar{X}$ 4.68 SD .93 -m 7	3.52 .99 8	3.30 .72 8	3.61 .78 8	4.03 .76 8	4.15 .70 8	3.76 .89 8
Socnon	13	$\bar{X}$ 5.40 SD 1.02 -m 3	3.10 .70 3	3.20 .75 3	3.70 1.27 3	3.70 1.01 3	4.60 .92 3	4.10 1.30 3
Priate	27	$\bar{X}$ 4.21 SD 1.32 -m 8	3.37 .99 8	3.37 .98 8	3.32 1.08 8	3.74 .85 8	4.53 .60 8	4.26 .97 8
Prinon	13	$\bar{X}$ 4.63 SD 1.28 -m 1	3.58 1.38 1	2.75 .83 1	3.08 .95 1	4.25 .83 1	4.42 .64 1	3.83 .99 1
Houate	93	$\bar{X}$ 4.70 SD 1.38 -m 14	3.37 1.44 15	3.23 1.10 15	3.45 1.27 15	4.17 1.32 15	4.44 1.16 15	3.95 1.40 15
Hounon	35	$\bar{X}$ 5.19 SD 1.51 -m 4	3.65 1.96 4	3.07 1.27 4	3.20 1.51 5	4.65 1.66 4	4.29 1.35 4	3.68 1.45 4
Yogate	427	$\bar{X}$ 5.26 SD 1.88 -m 25	3.77 2.06 26	3.74 1.99 28	4.33 1.86 26	4.62 1.77 32	4.06 1.70 28	4.59 1.76 30
Yognon	84	$\bar{X}$ 5.10 SD 1.73 -m 1	3.60 1.84 1	3.50 1.93 2	4.11 1.65 2	4.07 1.84 1	4.06 1.66 1	4.17 1.62 1

Role-group	N	Scales						
		(10)	(11)	(12)	(13)	(14)	(15)	(16)
Dirate	10	$\bar{X}$ 3.67 SD 1.33 -m 1	1.44 .69 1	2.56 .50 1	3.22 .42 1	4.78 .63 1	3.89 .57 1	3.75 .43 2
Dirnon	14	$\bar{X}$ 4.27 SD .86 -m 3	1.21 .55 0	3.55 .99 3	4.56 1.23 3	4.00 1.04 3	4.27 .62 3	3.82 .39 3
Socate	41	$\bar{X}$ 4.56 SD 1.02 -m 8	1.70 1.49 4	2.39 .89 8	3.70 1.00 8	4.70 1.36 8	4.42 .78 8	3.94 .60 8
Socnon	13	$\bar{X}$ 4.60 SD 1.43 -m 3	1.40 .66 3	2.20 .75 3	3.40 .66 3	4.70 1.01 3	5.10 .94 3	3.70 1.19 3
Priate	27	$\bar{X}$ 4.47 SD 1.31 -m 8	1.78 1.44 4	3.16 1.14 8	3.79 1.10 8	4.74 1.45 8	4.79 .89 8	3.67 .88 9
Prinon	13	$\bar{X}$ 4.50 SD 1.12 -m 1	1.31 1.07 0	3.33 1.43 1	4.25 1.36 1	4.58 .95 1	5.00 1.35 1	3.83 .55 1
Houate	93	$\bar{X}$ 4.76 SD 1.36 -m 15	1.77 1.35 12	3.09 1.32 16	3.99 1.40 14	4.65 1.33 15	4.50 1.20 15	3.86 1.06 14
Hounon	35	$\bar{X}$ 4.36 SD 1.31 -m 4	1.32 .82 4	3.16 1.69 4	3.71 1.63 4	4.71 1.61 4	4.57 1.17 5	4.10 1.01 5
Yogate	427	$\bar{X}$ 4.33 SD 1.86 -m 27	1.71 1.29 23	3.83 1.92 28	3.62 1.95 30	4.51 1.91 27	4.86 1.85 27	3.73 1.45 28
Yognon	84	$\bar{X}$ 4.33 SD 1.78 -m 2	1.59 1.08 2	3.45 1.88 2	3.20 1.74 2	4.21 1.93 2	4.41 1.86 2	3.81 1.58 2

TABLE XV p

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item MAORI

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	X	4.17	4.17	3.33	4.50	4.67	3.50	4.40
		SD	.37	1.21	.75	.76	.94	.50	.49
Dirnon	14	-m	4	4	4	4	4	4	5
		X	5.00	4.00	3.22	4.44	4.44	4.00	4.78
Socate	41	SD	.94	1.16	.79	.96	.96	.82	.79
		-m	5	5	5	5	5	5	5
Socnon	13	X	4.74	3.90	3.47	4.40	4.17	3.93	4.60
		SD	1.11	1.08	.81	1.05	.64	.68	.80
Priate	27	-m	10	11	11	11	11	11	11
		X	5.60	4.50	3.80	4.70	4.50	3.70	4.90
Prinon	13	SD	1.11	.81	1.08	.90	.92	.46	.54
		-m	3	3	3	3	3	3	3
Houate	93	X	5.06	4.67	3.88	4.56	3.94	4.13	4.81
		SD	1.03	1.14	1.32	.86	1.09	.70	.95
Hounon	35	-m	11	12	10	11	11	11	11
		X	4.81	4.09	3.70	3.73	4.27	4.00	4.27
Yogate	427	SD	1.03	1.68	1.27	.75	.86	.43	.45
		-m	2	2	3	2	2	2	2
Yognon	84	X	5.13	4.44	3.32	4.14	4.46	3.71	4.49
		SD	1.22	1.42	1.28	1.15	1.28	1.01	1.14
Dirate	10	-m	26	27	27	27	27	28	28
		X	5.36	4.43	3.46	4.36	5.14	3.71	5.00
Dirnon	14	SD	1.26	1.47	1.48	1.39	1.40	1.03	.84
		-m	7	7	7	7	7	7	7
Socate	41	X	5.69	6.00	5.79	5.00	4.81	2.70	4.82
		SD	1.84	1.47	1.55	1.90	2.01	1.54	1.75
Socnon	13	-m	45	46	47	47	47	49	48
		X	5.94	5.96	5.58	4.95	4.60	3.32	5.05
Priate	27	SD	1.70	1.47	1.77	1.95	2.11	2.00	1.83
		-m	-	-	-	-	-	-	-

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
(1)	(2)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Dirate	10	X	5.33	2.67	3.00	4.00	4.67	4.33	5.00
		SD	.75	.47	.81	.58	.47	.47	.89
Dirnon	14	-m	4	4	4	4	4	4	5
		X	5.78	2.78	4.00	4.33	4.66	5.00	4.60
Socate	41	SD	.79	.42	1.15	.94	.94	.82	.66
		-m	5	5	5	5	5	5	4
Socnon	13	X	5.37	2.97	3.00	4.10	5.20	5.23	4.73
		SD	1.11	.82	.97	.91	.70	.72	.68
Priate	27	-m	11	10	11	11	11	11	11
		X	5.80	3.30	3.50	3.90	5.00	5.70	4.90
Prinon	13	SD	.75	.78	1.43	.54	.78	.64	1.14
		-m	3	3	3	3	3	3	3
Houate	93	X	5.88	3.59	4.00	4.63	4.56	5.38	4.94
		SD	.92	.77	1.12	1.41	1.06	.99	.99
Hounon	35	-m	11	10	11	11	11	11	10
		X	4.81	3.36	4.55	4.18	4.82	4.73	4.64
Yogate	427	SD	1.19	.88	1.56	1.59	.72	1.36	.98
		-m	2	2	2	2	2	2	2
Yognon	84	X	5.49	3.20	3.60	4.46	4.63	5.08	4.91
		SD	1.15	1.14	1.48	1.20	1.38	1.03	1.17
Dirate	10	-m	27	27	28	27	28	27	26
		X	5.61	3.39	3.64	4.61	4.93	5.36	5.00
Dirnon	14	SD	1.15	1.21	1.72	1.52	1.28	1.32	.93
		-m	7	7	7	7	7	7	7
Socate	41	X	4.92	4.26	5.04	4.65	3.67	4.97	4.85
		SD	1.68	1.56	1.77	1.82	1.83	1.83	1.52
Socnon	13	-m	48	50	49	49	47	49	47
		X	5.20	4.46	5.23	4.87	4.24	5.38	4.98
Priate	27	SD	1.82	1.79	1.89	2.06	2.27	1.88	1.70
		-m	-	-	-	-	-	-	-

TABLE XV q

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations [-m] for Role-group Responses to Semantic Differential Scales with Stimulus Item CHURCH

Role-group	N	Scales							
		Good - Bad	Weak - Strong	Fast - Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Dirate	10	$\bar{X}$	5.10	4.30	3.10	4.70	4.78	5.33	4.44
		SD	1.14	1.49	1.22	1.55	1.22	1.19	.68
		-m	0	0	0	0	1	0	1
Dirnon	14	$\bar{X}$	6.08	4.42	3.33	5.00	4.08	5.17	4.50
		SD	.64	1.32	1.03	1.29	.76	.90	.64
		-m	2	2	2	2	2	2	2
Socate	41	$\bar{X}$	5.63	4.25	3.08	5.08	4.23	5.10	4.43
		SD	1.09	1.83	1.06	1.40	1.24	1.24	1.36
		-m	1	1	1	1	1	1	1
Sochon	13	$\bar{X}$	5.75	4.75	3.58	5.08	4.00	5.08	4.83
		SD	1.09	1.59	1.32	1.26	1.00	1.19	.99
		-m	1	1	1	1	1	1	1
Priate	27	$\bar{X}$	5.68	4.12	3.48	5.12	3.80	5.20	4.60
		SD	1.16	1.51	1.20	1.11	.85	1.06	.94
		-m	2	2	2	2	2	2	2
Prinon	13	$\bar{X}$	6.39	5.62	4.08	6.08	3.92	4.77	4.69
		SD	1.08	1.44	1.44	1.21	1.07	.89	1.14
		-m	0	0	0	0	0	0	0
Houate	93	$\bar{X}$	5.33	4.67	3.19	5.18	4.24	4.93	4.61
		SD	1.44	1.78	1.50	1.47	1.25	1.53	1.16
		-m	6	6	8	6	11	8	8
Hounon	35	$\bar{X}$	6.31	5.28	4.19	5.56	4.81	4.53	4.97
		SD	1.04	1.63	1.18	1.32	1.57	1.71	1.08
		-m	3	3	3	3	4	3	3
Yogate	427	$\bar{X}$	4.62	4.24	3.65	4.77	4.38	4.59	4.50
		SD	2.22	2.13	1.93	2.08	1.52	1.66	1.84
		-m	36	38	43	42	39	40	40
Yognon	84	$\bar{X}$	4.95	4.75	3.86	5.29	4.71	4.85	4.49
		SD	2.36	2.24	2.17	2.21	1.71	1.94	2.14
		-m	-	-	-	-	-	-	-

Role-group	N	Scales							
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small	
(10)	(11)	(12)	(13)	(14)	(15)	(16)			
Dirate	10	$\bar{X}$	4.10	5.00	4.70	4.78	4.10	4.50	5.00
		SD	1.64	1.34	1.10	1.03	.94	.92	1.41
		-m	0	0	0	1	0	0	1
Dirnon	14	$\bar{X}$	5.42	4.17	4.83	5.23	4.67	5.08	4.25
		SD	.64	.90	1.52	.97	.85	.86	.92
		-m	2	2	2	2	2	2	2
Socate	41	$\bar{X}$	4.63	4.25	3.98	5.58	4.43	4.93	4.38
		SD	1.76	1.56	1.51	1.48	1.16	1.33	1.34
		-m	1	1	1	1	1	1	1
Sochon	13	$\bar{X}$	5.00	4.67	4.67	5.92	3.67	5.42	4.92
		SD	1.29	1.03	1.25	.95	.94	.95	1.26
		-m	1	1	1	1	1	1	1
Priate	27	$\bar{X}$	4.60	3.92	4.24	5.52	4.48	4.88	3.92
		SD	1.50	1.38	1.37	1.10	.76	1.37	1.26
		-m	2	2	2	2	2	2	2
Prinon	13	$\bar{X}$	5.39	4.39	5.31	6.23	4.69	6.00	4.23
		SD	1.44	1.50	2.02	.97	1.44	.78	1.67
		-m	0	0	0	0	0	0	0
Houate	93	$\bar{X}$	4.81	4.66	4.78	6.01	4.39	5.00	4.32
		SD	1.60	1.48	1.82	1.20	1.24	1.19	1.64
		-m	6	8	6	5	8	6	6
Hounon	35	$\bar{X}$	5.28	4.22	5.28	6.38	4.53	5.59	5.03
		SD	1.38	1.88	1.72	.93	1.15	1.03	1.49
		-m	3	3	3	3	3	3	3
Yogate	427	$\bar{X}$	4.77	4.26	4.23	5.64	4.62	4.92	4.55
		SD	1.95	1.66	1.90	1.77	1.93	2.06	1.78
		-m	43	38	42	41	42	41	40
Yognon	84	$\bar{X}$	4.96	4.29	4.56	6.05	4.71	4.96	4.30
		SD	2.18	1.87	2.22	1.88	2.19	2.43	2.00
		-m	-	-	-	-	-	-	-

TABLE XV r

Mean Value ( $\bar{X}$ ), Standard Deviation (SD) and Number of Missing Observations (-m) for Role-group Responses to Semantic Differential Scales with Stimulus Item

STATE WARD

Role-group	N	Scales						
		Good - Bad	Weak - Strong	Fast Slow	Wise - Foolish	Male - Female	Young - Old	Sweet - Sour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dirate	10	$\bar{X}$ 3.89 SD .74 -m 1	3.00 .48 1	3.33 .47 1	3.67 .47 1	4.33 .67 1	1.67 .47 1	4.25 .43 2
Dirnon	14	$\bar{X}$ 4.25 SD 1.09 -m 2	3.33 1.03 2	4.17 .80 2	3.58 .95 2	4.25 .60 2	2.00 .91 2	3.83 .80 2
Socate	41	$\bar{X}$ 4.43 SD 1.00 -m 4	3.49 1.22 4	3.60 .97 4	3.68 .96 4	4.14 .84 4	1.87 .92 3	4.19 .93 4
Socnon	13	$\bar{X}$ 4.27 SD 1.03 -m 2	3.18 1.19 2	3.18 .97 2	3.36 1.34 2	4.18 .85 2	2.27 1.23 2	3.63 2
Priate	27	$\bar{X}$ 4.17 SD 1.09 -m 4	3.26 .67 4	3.39 .77 4	3.30 .91 4	4.00 .42 4	2.16 1.29 2	4.04 1.08 4
Prinon	13	$\bar{X}$ 4.54 SD 1.34 -m 0	3.62 1.00 0	3.85 1.51 0	3.46 1.28 0	4.31 .82 0	1.92 .73 0	3.77 1.12 0
Houate	93	$\bar{X}$ 4.08 SD 1.46 -m 8	3.34 1.38 8	3.62 1.29 9	2.95 1.23 9	3.95 1.33 9	1.83 1.16 10	3.68 1.16 10
Hounon	35	$\bar{X}$ 4.29 SD 1.57 -m 4	3.45 1.36 4	3.87 1.26 4	3.43 1.02 5	3.97 1.79 4	1.84 1.08 4	3.68 1.59 4
Yogate	427	$\bar{X}$ 4.09 SD 2.24 -m 33	4.65 1.91 41	4.41 1.84 40	4.26 2.04 37	4.16 1.92 37	2.86 1.60 36	4.18 1.79 42
Yognon	84	$\bar{X}$ 4.21 SD 2.33 -m -	4.62 2.02 -	4.51 2.06 -	4.49 2.06 -	4.05 2.01 -	3.46 1.98 -	3.96 1.76 -

Role-group	N	Scales						
		Cold - Warm	Poor - Rich	Passive - Active	Dirty - Clean	Soft - Hard	Nice - Awful	Large - Small
(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dirate	10	$\bar{X}$ 3.78 SD 1.03 -m 1	2.44 .69 1	3.22 1.40 1	4.11 .57 1	4.00 .81 1	4.67 1.05 1	3.00 .94 1
Dirnon	14	$\bar{X}$ 3.83 SD 1.07 -m 2	2.92 1.04 2	4.25 1.09 2	3.92 .76 2	4.00 1.08 2	4.25 .83 2	3.42 .95 2
Socate	41	$\bar{X}$ 4.62 SD 1.00 -m 4	2.49 .90 2	3.32 1.07 4	4.32 1.30 4	4.61 1.11 3	4.87 .94 4	3.70 .96 4
Socnon	13	$\bar{X}$ 4.18 SD 1.19 -m 2	2.36 1.15 2	3.00 1.04 2	4.36 .98 2	4.36 1.15 2	4.36 .64 2	3.27 1.05 2
Priate	27	$\bar{X}$ 3.87 SD .99 -m 4	2.78 .83 4	3.52 .88 4	4.22 1.02 4	4.22 1.14 4	4.57 1.17 4	3.78 .78 4
Prinon	13	$\bar{X}$ 3.85 SD 1.29 -m 0	2.39 1.00 0	4.23 1.58 0	4.00 1.47 0	3.85 .86 0	4.62 1.44 0	3.31 .91 0
Houate	93	$\bar{X}$ 4.16 SD 1.44 -m 9	2.72 1.19 10	4.30 1.54 10	3.66 1.29 9	3.61 1.33 10	4.26 1.19 9	3.64 .89 10
Hounon	35	$\bar{X}$ 3.71 SD 1.49 -m 4	2.68 1.09 4	4.23 1.41 4	4.26 1.54 4	3.42 1.36 4	4.42 1.26 4	3.19 1.23 4
Yogate	427	$\bar{X}$ 4.20 SD 1.81 -m 44	4.16 1.67 40	4.71 1.77 41	5.04 1.84 39	3.79 1.87 39	4.28 1.93 36	4.30 1.48 38
Yognon	84	$\bar{X}$ 4.10 SD 1.95 -m -	3.77 1.90 -	4.54 1.95 -	4.80 2.02 -	3.63 2.10 -	4.27 2.21 -	4.05 1.81 -

TABLE XVI

Univariate F Tests of Significance (p) and  
Correlations [  $r_1$ ,  $r_2$  ] between all  
Variables and Composite Scores  
Shown by Stimulus Items

Variable Label	Stimulus Item			Stimulus Item		
	Teacher			Delinquent		
	P	$r_1$	$r_2$	P	$r_1$	$r_2$
[1]	[2]	[3]	[4]	[5]	[6]	[7]
Sex	.001*	.033	.867	.001*	.033	.860
Age	.001*	.969	-.021	.001*	.966	-.021
Good	.004*	.072	.195	.023	.011	-.120
Weak	.001*	.075	.204	.001*	-.185	-.210
Fast	.639	.011	.182	.001*	-.098	-.084
Wise	.039	-.019	.249	.001*	-.068	-.126
Male	.001*	-.069	-.141	.247	-.042	-.056
Young	.453	-.020	-.047	.101*	-.049	-.145
Sweet	.008*	.043	.277	.003*	-.037	-.153
Cold	.007*	.063	.138	.004*	-.010	-.195
Poor	.619	.002	.119	.002*	-.078	-.019
Passive	.077	.052	.172	.783	-.014	-.196
Dirty	.125	.031	.317	.217	-.052	-.094
Soft	.256	.026	-.043	.490	.000	-.133
Nice	.006*	.061	.204	.118	.003	-.181
Large	.088	.011	.124	.559	-.034	-.010

\* Denotes statistically significant differences

	Welfare Home			Mother		
	P	$r_1$	$r_2$	P	$r_1$	$r_2$
	[1]	[2]	[3]	[4]	[5]	[6]
Sex	.001*	.034	.935	.001*	.033	.826
Age	.001*	.972	-.041	.001*	.982	.015
Good	.026	.021	.148	.714	-.012	.077
Weak	.909	-.010	.077	.006*	.073	.152
Fast	.001*	-.085	.144	.434	-.005	.138
Wise	.058	-.007	.153	.174	.008	.148
Male	.685	-.003	.004	.001*	.074	.331
Young	.915	-.007	-.014	.001*	.070	-.310
Sweet	.038	-.024	.147	.404	.009	.123
Cold	.042	.026	.243	.108	.054	.121
Poor	.254	-.058	.013	.121	-.043	-.007
Passive	.028	.039	.015	.001*	.041	.224
Dirty	.051	.045	.181	.582	.003	.118
Soft	.634	-.004	-.006	.974	.011	-.050
Nice	.174	.027	.129	.594	.022	.150
Large	.009*	-.072	.007	.366	.027	.111

\* Denotes statistically significant differences

[1]	Magistrate			Housemaster		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
	[2]	[3]	[4]	[5]	[6]	[7]
Sex	.001*	.035	.832	.001*	.036	.793
Age	.001*	.970	-.096	.001*	.974	-.061
Good	.001*	.221	.379	.130	.017	.152
Weak	.001*	.116	.309	.084	.008	.252
Fast	.039	.021	.285	.171	-.047	.099
Wise	.001*	.104	.227	.015	-.009	.224
Male	.031	.070	.128	.005*	.066	.192
Young	.328	.015	-.202	.047	-.056	.093
Sweet	.001*	.096	.215	.098	-.022	.083
Cold	.015	.078	.116	.301	.041	.039
Poor	.041	.068	-.065	.002*	-.077	.085
Passive	.018	.078	.090	.054	.070	.046
Dirty	.001*	.105	.168	.019	.024	.282
Soft	.270	.056	-.096	.849	-.021	-.003
Nice	.001*	.181	.215	.231	.032	.095
Large	.230	.025	.196	.003*	-.025	.132

\* Denotes statistically significant differences

[1]	Father			I - myself		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
	[2]	[3]	[4]	[5]	[6]	[7]
Sex	.001*	.035	.847	.001*	.034	.922
Age	.001*	.981	-.046	.001*	.984	-.031
Good	.002*	.076	.250	.001*	.113	.094
Weak	.270	-.002	.278	.219	.043	.090
Fast	.601	-.048	.047	.417	-.028	.049
Wise	.011*	.060	.274	.001*	.093	.098
Male	.288	.047	.167	.536	-.004	.049
Young	.001*	.097	-.163	.001*	.410	-.010
Sweet	.337	.028	.218	.481	-.028	.100
Cold	.001*	.098	.318	.001*	.091	.037
Poor	.828	-.035	.013	.604	.026	-.038
Passive	.089	.064	.098	.143	.045	.031
Dirty	.001*	.094	.220	.001*	.119	.209
Soft	.258	.058	-.008	.690	.006	.006
Nice	.001*	.086	.214	.638	-.002	.109
Large	.677	-.001	.007	.011*	.078	-.115

\* Denotes statistically significant differences

	Orphanage			Prime Minister		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sex	.001*	.033	.864	.001*	.035	.924
Age	.001*	.977	.003	.001*	.963	-.063
Good	.027	-.030	.151	.025	.073	-.005
Weak	.879	-.010	.084	.888	-.011	-.040
Fast	.003*	-.082	.061	.497	-.000	-.052
Wise	.076	-.036	.180	.488	-.013	-.054
Male	.003*	-.084	-.167	.021	.072	.079
Young	.972	-.020	-.013	.028	-.063	-.149
Sweet	.039	-.071	.023	.001*	.108	-.019
Cold	.135	-.027	.223	.001*	.100	-.055
Poor	.001*	-.102	.158	.530	-.025	-.011
Passive	.140	-.024	.208	.717	.039	.088
Dirty	.032	.054	.193	.004	.086	.028
Soft	.043	-.056	.018	.001*	.111	.095
Nice	.173	-.024	.140	.001*	.114	-.019
Large	.074	-.002	-.137	.016	-.071	.095

\* Denotes statistically significant differences

	Policeman			Friend		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sex	.001*	.034	.885	.001*	.032	.952
Age	.001*	.945	-.103	.001*	.915	-.032
Good	.001*	.211	.308	.070	.039	.098
Weak	.001*	.085	.172	.321	.036	.073
Fast	.023	-.027	.288	.001*	-.113	.026
Wise	.001*	.042	.263	.001*	.084	-.040
Male	.179	.035	.169	.001*	-.029	-.480
Young	.035	-.056	-.018	.001*	.368	-.017
Sweet	.001*	.109	.138	.717	.001	.141
Cold	.001*	.082	.067	.001*	.111	.087
Poor	.143	-.030	.001	.275	.014	-.083
Passive	.003*	.078	.119	.875	.012	.007
Dirty	.001*	.087	.272	.001*	.107	.198
Soft	.149	.063	-.005	.409	.037	.049
Nice	.001*	.194	.241	.001*	.051	.235
Large	.001*	.092	.091	.131	.003	-.163

\* Denotes statistically significant differences

	Social Worker			Pakeha		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sex	.001*	.032	.894	.001*	.034	.854
Age	.001*	.956	.022	.001*	.979	-.013
Good	.543	.051	.017	.001*	.098	-.188
Weak	.018	.074	.063	.001*	.122	-.212
Fast	.645	-.015	-.024	.001*	.092	-.234
Wise	.785	.004	.072	.005*	.080	-.266
Male	.246	-.057	-.089	.003*	.074	-.300
Young	.654	-.003	.003	.001*	.159	-.343
Sweet	.773	.115	.117	.001*	.073	-.309
Cold	.001*	.119	.008	.004*	.067	-.258
Poor	.001*	-.080	.029	.001*	.069	-.324
Passive	.003*	.070	.057	.001*	.085	-.271
Dirty	.103	.047	.226	.001*	.089	-.131
Soft	.786	.022	-.062	.001*	.051	-.327
Nice	.287	.051	.138	.002*	.061	-.242
Large	.212	.017	.036	.001*	.099	-.260

\* Denotes statistically significant differences

	A Poor Person			Maori		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sex	.001*	.035	.875	.001*	.035	.837
Age	.001*	.978	-.068	.001*	.926	-.099
Good	.921	-.002	.089	.796	-.012	-.046
Weak	.255	.040	.048	.001*	-.123	-.233
Fast	.430	.010	-.157	.001*	-.164	-.330
Wise	.259	-.025	-.117	.276	-.003	-.239
Male	.208	.010	-.135	.246	.022	-.232
Young	.001*	.112	-.096	.001*	.189	-.190
Sweet	.378	-.002	-.075	.391	.044	-.109
Cold	.003*	.088	.025	.001*	.122	-.112
Poor	.017	.059	.080	.590	-.015	-.164
Passive	.389	-.011	-.122	.005*	-.065	.267
Dirty	.001*	.116	-.025	.456	.039	-.156
Soft	.011*	.083	-.021	.001*	.175	-.057
Nice	.175	.041	.050	.013	.072	-.113
Large	.006*	.087	.006	.064	.068	-.068

\* Denotes statistically significant differences

	Church			State Ward		
	P	r <sub>1</sub>	r <sub>2</sub>	P	r <sub>1</sub>	r <sub>2</sub>
	[1]	[2]	[3]	[4]	[5]	[6]
Sex	.001*	.034	.842	.001*	.033	.825
Age	.001*	.974	-.026	.001*	.957	-.001
Good	.001*	.140	.234	.936	.009	.023
Weak	.008*	.057	.285	.001*	-.137	.026
Fast	.495	-.019	.141	.022	-.081	.084
Wise	.027	.064	.205	.001*	-.112	-.070
Male	.528	-.033	.038	.634	-.012	-.077
Young	.244	.032	-.223	.001*	-.118	.087
Sweet	.868	.022	.118	.213	-.039	-.138
Cold	.086	.040	.261	.307	-.005	-.055
Poor	.609	.017	-.068	.001*	-.175	-.038
Passive	.001*	.071	.276	.005*	-.078	.177
Dirty	.017	.026	.314	.001*	-.109	.005
Soft	.966	-.015	.057	.047	.009	-.237
Nice	.296	.041	.167	.650	.017	-.105
Large	.245	.005	.070	.001*	-.094	-.085

\* Denotes statistically significant differences

TABLE XVII

Contrast Values for Role-Groups Calculated  
From Discriminant-Function Coefficients  
for each Stimulus Item shown without  
Covariates and Adjusted for Two  
Covariates (Sex and Age).

Role-Groups	Without Covariates		Adjusted for Two Covariates			
	State		Non-State		State	Non-State
	D <sub>1</sub>	D <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>1</sub>	D <sub>1</sub>
[1]	[2]	[3]	[4]	[5]	[6]	[7]
	<u>Stimulus Item : Teacher</u>					
Dirate	2.121	-1.572	-	-	-1.151	-
Dirnon	-	-	1.348	-0.710	-	-0.048
Socate	0.155	0.042	-	-	0.181	-
Socnon	-	-	0.583	0.330	-	0.377
Priate	0.546	-0.697	-	-	-0.472	-
Prinon	-	-	0.499	-0.359	-	-
Houate	-0.154	0.062	-	-	0.194	-
Hounon	-	-	-0.094	0.603	-	0.482
Yogate	-3.447	0.049	-	-	0.708	-
Yognon	-	-	-3.446	0.199	-	0.305
Matate	0.993	0.993	-	-	-0.194	-
Matnon	-	-	0.896	0.956	-	-0.184

[1]	[2]	[3]	[4]	[5]	[6]	[7]
	<u>Stimulus Item : Delinquent</u>					
Dirate	2.127	-1.164	-	-	-0.699	-
Dirnon	-	-	1.245	-0.794	-	0.035
Socate	0.136	0.054	-	-	-0.001	-
Socnon	-	-	0.580	0.100	-	0.227
Priate	0.562	-0.703	-	-	-0.402	-
Prinon	-	-	0.464	-0.430	-	-0.206
Hcuate	-0.060	-0.075	-	-	-0.298	-
Hounon	-	-	-0.039	0.532	-	0.065
Yogate	-3.441	0.020	-	-	0.818	-
Yognon	-	-	-3.435	0.235	-	0.667
Matate	1.037	0.883	-	-	-0.461	-
Matnon	-	-	0.746	1.342	-	-0.205
	<u>Stimulus Item : Welfare Home</u>					
Dirate	2.028	-1.119	-	-	0.107	-
Dirnon	-	-	1.357	-0.850	-	0.435
Socate	0.151	0.102	-	-	-0.127	-
Socnon	-	-	0.609	0.070	-	-0.367
Priate	0.496	-0.571	-	-	0.158	-
Prinon	-	-	0.464	-0.507	-	0.200
Houate	-0.073	-0.021	-	-	0.399	-
Hounon	-	-	-0.077	0.556	-	-0.331
Yogate	-3.414	0.058	-	-	-0.625	-
Yognon	-	-	-3.445	0.163	-	-0.485
Matate	1.048	1.001	-	-	0.570	-
Matnon	-	-	0.855	1.118	-	0.660

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Mother</u>						
Dirate	2.215	-1.783	-	-	-	-
Dirnon	-	-	1.290	-0.500	-	-
Socate	0.171	-0.024	-	-	-	-
Socnon	-	-	0.687	0.172	-	-
Priate	0.546	-0.570	-	-	-	-
Prinon	-	-	0.415	-0.346	-	-
Houate	-0.151	-0.007	-	-	-	-
Hounon	-	-	-0.128	0.537	-	-
Yogate	-3.391	0.018	-	-	-	-
Yognon	-	-	-3.442	0.269	-	-
Matate	0.920	1.186	-	-	-	-
Matnon	-	-	-	-	-	-
<u>Stimulus Item : Magistrate</u>						
Dirate	2.057	-1.277	-	-	-0.219	-
Dirnon	-	-	1.292	-0.873	-	0.171
Socate	0.137	0.031	-	-	-0.172	-
Socnon	-	-	0.628	0.026	-	-0.096
Priate	0.410	-0.619	-	-	-0.283	-
Prinon	-	-	0.537	-0.389	-	0.625
Houate	-0.106	0.006	-	-	0.113	-
Hounon	-	-	0.004	0.569	-	0.251
Yogate	-3.454	0.004	-	-	-0.819	-
Yognon	-	-	-3.359	0.411	-	0.069
Matate	0.885	0.939	-	-	-0.005	-
Matnon	-	-	0.969	1.181	-	0.503

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Housemaster</u>						
Dirate	2.101	-1.407	-	-	-0.249	-
Dirnon	-	-	1.244	-0.703	-	0.076
Socate	0.230	-0.054	-	-	0.159	-
Socnon	-	-	0.614	0.200	-	0.370
Priate	0.430	-0.884	-	-	-0.463	-
Prinon	-	-	0.479	-0.342	-	-0.225
Houate	-0.126	0.015	-	-	-0.183	-
Hounon	-	-	-0.035	0.520	-	0.137
Yogate	-3.412	0.079	-	-	-0.047	-
Yognon	-	-	-3.434	0.085	-	-0.659
Matate	0.979	1.140	-	-	-0.363	-
Matnon	-	-	0.930	1.351	-	0.721
<u>Stimulus Item : Father</u>						
Dirate	2.014	-1.500	-	-	-	-
Dirnon	-	-	1.275	-0.682	-	-
Socate	0.181	0.040	-	-	-	-
Socnon	-	-	0.627	0.017	-	-
Priate	0.472	-0.525	-	-	-	-
Prinon	-	-	0.513	-0.523	-	-
Houate	-0.100	-0.008	-	-	-	-
Hounon	-	-	-0.015	0.458	-	-
Yogate	-3.399	0.060	-	-	-	-
Yognon	-	-	-3.380	0.208	-	-
Matate	0.946	1.291	-	-	-	-
Matnon	-	-	0.836	1.164	-	-

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : I-Myself</u>						
Dirate	2.047	-1.205	-	-	-	-
Dirnon	-	-	1.295	-0.820	-	-
Socate	0.143	-0.820	-	-	-	-
Socnon	-	-	0.653	0.020	-	-
Priate	0.512	-0.621	-	-	-	-
Prinon	-	-	0.477	-0.314	-	-
Houate	-0.090	0.032	-	-	-	-
Hounon	-	-	-0.059	0.455	-	-
Yogate	-3.386	0.036	-	-	-	-
Yognon	-	-	-3.374	0.236	-	-
Matate	0.897	1.063	-	-	-	-
Matnon	-	-	2.679	1.103	-	-

<u>Stimulus Item : Orphanage</u>						
Dirate	2.110	-1.012	-	-	-	-
Dirnon	-	-	1.329	-0.686	-	-
Socate	0.185	-0.255	-	-	-	-
Socnon	-	-	0.639	-0.056	-	-
Priate	0.540	-0.718	-	-	-	-
Prinon	-	-	0.492	-0.331	-	-
Houate	-0.163	0.052	-	-	-	-
Hounon	-	-	-0.079	0.479	-	-
Yogate	-3.424	0.044	-	-	-	-
Yognon	-	-	-3.396	0.147	-	-
Matate	0.963	1.058	-	-	-	-
Matnon	-	-	0.831	1.278	-	-

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Prime Minister</u>						
Dirate	2.015	-1.181	-	-	-	-
Dirnon	-	-	1.337	-0.789	-	-
Socate	0.166	0.108	-	-	-	-
Socnon	-	-	0.624	0.087	-	-
Priate	0.475	-0.514	-	-	-	-
Prinon	-	-	0.489	-0.576	-	-
Houate	-0.100	-0.024	-	-	-	-
Hounon	-	-	0.045	0.498	-	-
Yogate	-3.454	0.090	-	-	-	-
Yognon	-	-	-3.465	0.072	-	-
Matate	0.965	1.105	-	-	-	-
Matnon	-	-	0.903	0.610	-	-

<u>Stimulus Item : Policeman</u>						
Dirate	2.100	-1.180	-	-	0.338	-
Dirnon	-	-	1.301	-0.826	-	0.192
Socate	0.139	0.001	-	-	-0.059	-
Socnon	-	-	0.696	-0.052	-	0.143
Priate	0.459	-0.579	-	-	-0.081	-
Prinon	-	-	0.516	-0.413	-	0.398
Houate	-	-	-0.018	0.498	-	0.089
Yogate	-3.557	0.027	-	-	-1.185	-
Yognon	-	-	-3.377	0.393	-	-0.367
Matate	0.893	0.855	-	-	-0.058	-
Matnon	-	-	0.926	1.153	-	0.389

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Friend</u>						
Dirate	1.847	-1.024	-	-	-0.134	-
Dirnon	-	-	1.478	-0.774	-	0.686
Socate	0.189	0.033	-	-	0.173	-
Socnon	-	-	0.673	-0.055	-	0.231
Priate	0.646	-0.582	-	-	0.492	-
Prinon	-	-	0.690	-0.447	-	0.733
Houate	-0.129	-0.031	-	-	0.005	-
Hounon	-	-	-0.036	0.506	-	0.021
Yogate	-3.639	0.038	-	-	-1.455	-
Yognon	-	-	-3.626	0.202	-	-1.300
Matate	0.969	1.046	-	-	0.231	-
Matnon	-	-	0.938	1.088	-	0.231

<u>Stimulus Item : Social Worker</u>						
Dirate	2.207	-1.256	-	-	-	-
Dirnon	-	-	1.431	-0.668	-	-
Socate	0.236	-0.120	-	-	-	-
Socnon	-	-	0.613	0.013	-	-
Priate	0.456	-0.471	-	-	-	-
Prinon	-	-	0.537	-0.582	-	-
Houate	-0.146	0.066	-	-	-	-
Hounon	-	-	-0.090	0.498	-	-
Yogate	-3.484	0.076	-	-	-	-
Yognon	-	-	-3.531	0.117	-	-
Matate	0.982	1.033	-	-	-	-
Matnon	-	-	0.789	1.294	-	-

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Pakeha</u>						
Dirate	2.071	-1.131	-	-	-	-
Dirnon	-	-	1.332	-0.842	-	-
Socate	0.147	-0.011	-	-	-	-
Socnon	-	-	0.681	0.241	-	-
Priate	0.544	-0.776	-	-	-	-
Prinon	-	-	0.422	-0.485	-	-
Houate	-0.104	-0.012	-	-	-	-
Hounon	-	-	-0.072	0.631	-	-
Yogate	-3.401	0.061	-	-	-	-
Yognon	-	-	-3.421	0.102	-	-
Matate	0.955	0.953	-	-	-	-
Matnon	-	-	1.801	1.269	-	-

<u>Stimulus Item : Poor Person</u>						
Dirate	2.018	-1.008	-	-	-	-
Dirnon	-	-	1.247	-1.113	-	-
Socate	0.163	0.061	-	-	-	-
Socnon	-	-	0.619	0.191	-	-
Priate	0.491	-0.689	-	-	-	-
Prinon	-	-	0.473	-0.419	-	-
Houate	-0.080	0.012	-	-	-	-
Hounon	-	-	-0.014	0.582	-	-
Yogate	-3.402	0.038	-	-	-	-
Yognon	-	-	-3.391	0.241	-	-
Matate	0.971	1.004	-	-	-	-
Matnon	-	-	0.905	1.100	-	-

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : Maori</u>						
Dirate	1.926	-1.356	-	-	-0.016	-
Dirnon	-	-	1.318	-0.918	-	-0.261
Socate	0.285	0.025	-	-	-0.412	-
Socnon	-	-	0.682	0.076	-	-0.210
Priate	0.527	-0.703	-	-	-0.163	-
Prinon	-	-	0.429	-0.427	-	-0.045
Houate	-0.062	0.100	-	-	-0.184	-
Hounon	-	-	0.007	0.692	-	-0.185
Yogate	-3.584	0.082	-	-	1.300	-
Yognon	-	-	-3.538	0.210	-	1.095
Matate	1.045	1.064	-	-	-0.478	-
Matnon	-	-	0.965	1.155	-	-0.441
<u>Stimulus Item : Church</u>						
Dirate	2.112	-1.366	-	-	-	-
Dirnon	-	-	1.307	-0.729	-	-
Socate	0.165	-0.118	-	-	-	-
Socnon	-	-	0.653	-0.014	-	-
Priate	0.484	-0.658	-	-	-	-
Prinon	-	-	0.472	-0.272	-	-
Houate	-0.109	-0.012	-	-	-	-
Hounon	-	-	0.073	0.602	-	-
Yogate	-3.425	0.027	-	-	-	-
Yognon	-	-	-3.410	0.239	-	-
Matate	1.003	1.081	-	-	-	-
Matnon	-	-	0.821	1.220	-	-

[1]	[2]	[3]	[4]	[5]	[6]	[7]
<u>Stimulus Item : State Ward</u>						
Dirate	2.096	-1.162	-	-	0.402	-
Dirnon	-	-	1.253	-0.601	-	-0.025
Socate	0.270	-0.249	-	-	0.679	-
Socnon	-	0.623	-0.038	-	0.182	-
Priate	0.496	-0.764	-	-	0.261	-
Prinon	-	-	0.551	-0.378	-	0.284
Houate	-0.053	0.063	-	-	0.283	-
Hounon	-	-	-0.043	0.554	-	-0.155
Yogate	-3.466	0.032	-	-	-0.823	-
Yognon	-	-	-3.479	0.221	-	-0.891
Matate	0.946	0.964	-	-	0.226	-
Matnon	-	-	0.806	0.860	-	-0.423

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