Social Representations and Social Cognition:
A Convergence of Different Traditions

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Abstract

This thesis explores the possibility of forging links between Moscovici's theory of social representations and theoretical models which have achieved contemporary dominance in social cognition research. The first part of the thesis attempts a theoretical and empirical integration of social representations theory and social schema models. The results of two empirical studies suggest the utility of reconciling these approaches. These studies investigate the development of internalised representations of Australian society. A multidimensional scaling (MDS) procedure was used in which 12 social groups which characterise Australian society were rated for their similarity. In the first study, this procedure was carried out by two samples: a sample of 13 to 14 year old secondary school students and a sample of university students. The resultant 'spatial maps' from this procedure suggested qualitative and developmental differences in the perception of the social group structure of Australian society by the two samples. An analysis of the degree of individual differences in similarity ratings within and between the two samples indicated that such variation decreased considerably with age. This finding suggests that societal representations become more consensual in nature during adolescent social development. The notion of consensus is central to social representations theory, but has received little attention in social schema research.

A second MDS study investigating representations of Australian society provided further support for the above findings. In addition, it revealed important socioeconomic group differences in societal representations. Unlike social representations research, schema research has not explored possible social group differences in social knowledge domains.

The second part of the thesis explores the interconnections between social representations theory and attribution theory. It argues that social representations theory can provide a theoretical context for determining the social origins of attributions. This is discussed with particular reference to individualism as a dominant and widespread (consensual) value and belief system within western industrialised societies.

The dominance of individualism as a belief system is explored empirically by asking secondary school students from two different schools to make attributions for success and failure of examination candidates from different social backgrounds. It was expected and found that individualist (internal) explanations are preferred over external attributions for success and failure. This individualist preference increased with age. This finding is consistent with the social representations literature which argues that the preference for internal attributions in western societies reflects an underlying representation of the person as being a primary causative agent in all behavioural outcomes.

The third part of the thesis extends the analysis of representations of Australian society and its constituent social groups, but in a methodologically contrasting way. It investigates the objective and subjective impressions of an advertisement ('Celebration of a Nation') which was made specifically to encourage Australians to celebrate Australia's Bicentenial birthday in 1988. Subjective responses from a sample of university students indicated that the advertisement evoked predominantly positive emotions. Open-ended responses indicated that one of the dominant themes contained in the advertisement was the unity and togetherness of the Australian people. This was often coupled with the imagery of the social diversity of Australian society. These contradictory elements are explored in terms of their relevance for ideas about the structure and internal organisation of social representations.

The concluding chapter argues that all of the theoretical and empirical investigations within this thesis can be extended by considering social identity processes as important mediating and/or explanatory constructs. Suggestions for further empirical work are presented from within the social identity perspective.

Author's Statement

This thesis contains no material which has been accepted for the award of any other degree or diploma at any University. To the best of my knowledge and belief it contains no material previously published or written by any other person except where due reference is made in the text. If accepted for the award of the degree I consent to the thesis being made available for photocopying and loan.

Signed:

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Acknowledgements

PREFACE

This thesis originally developed from an interest in the manner in which people acquire knowledge about the society in which they live, and the extent to which such knowledge is shared. How is this knowledge expressed in terms of consensual attitudes, belief systems and ideologies which proliferate within a society, and to what extent does this consensual thinking constrain our understanding of social reality? It was obvious to me that social knowledge is derived by the process of interpersonal communication between individuals and groups, and disseminated via institutional authorities such as the family, schools, and the media. Yet there appears to be little in the social psychological literature which reflects upon the wider socio-cultural context and its influence on the content of social knowledge acquired by the individual. Furthermore, it also became clear that scant attention has been paid by social psychologists to describing the actual content of social knowledge. I explored the social cognition literature which has become dominant within social psychology only to find studies almost exclusively on empirically derived models based on information processing issues. While some of this research is of considerable interest and seems to have generated useful principles regarding the way in which social information is attended to, stored, organised and retrieved from memory, it nevertheless struck me as a particularly reductionist way to study the processes of acquiring social knowledge. While there exists an implicit assumption about the sharedness of social information within social cognition models, very few studies investigate the actual content of this knowledge and the extent to which it is shared. While the external environment is often alluded to, research on how individual knowledge is influenced by a society's socioeconomic, political and cultural character is negligible.

This led me to search the socialisation literature. Political and economic socialisation studies clearly demonstrate that children learn to identify with and become attached to the socio-political system relatively early in life (Easton & Dennis, 1969; Stacey, 1982).

Children develop a sense of nationality, a sense of class and social group membership, as well as a knowledge of economic and political institutions, roles, conventions and practices. These socialisation studies led me to a more specific interest in the idea that some attitudes and beliefs, particularly those of political, economic and social relevance, may be functional in the maintenance of a society's institutional and social cohesiveness. Political studies taught me that this was indeed the case: that people living in social democratic capitalist societies accepted certain institutional and social arrangements as reflecting 'a natural order'. This, of course, does not extend to every individual within such societies, nor to all political subcultures. One of the major characteristics of social democracies is their tolerance of conflicting political orientations. Yet, despite this political tolerance, theories suggested the existence of a diffuse level of unquestioning support or acceptance for certain institutional arrangements such as parliamentary democracy, electoral politics, wage labour, and income inequality.

While there are sufficient empirical studies within the social psychological literature which demonstrate the range of social knowledge acquired by the developing child, from gender identity to moral values, there exist few theoretical perspectives within the social psychological literature from which to view the empirical reality of the acquisition and development of this knowledge. Cognitive stage models in the Piagetian tradition are the exception. Cognitive developmental theories are somewhat deficient in that they focus primarily on the internal cognitive capacities of the developing child in understanding the social world. Little is said about the social realities which impinge upon the mind of the child. Realities, like the social structure of a society, its cultural norms, moral values, explanations for everyday occurrences and political and historical traditions, are alluded to rarely within the cognitive approach.

I then became aware of Moscovici's writings on social representations. At first, this theory was difficult to grasp since it was predominantly abstract in nature. Being a particularly French tradition of social psychological research, a further frustration was that

most of the literature was unavailable in English. Despite these difficulties I remained pulled towards the theory, for it seemed to offer the kind of theoretical alternative I was looking for. Social representations are described as socially shared and communicated 'theories', 'branches of knowledge', 'attitudes', 'images' and 'values' which exist within any collectivity. Social representations are located in the content of everyday thinking or in what becomes regarded as 'common-sense' within a cultural collectivity. Some representations circulate widely within a society, cutting across social groups, and thus define aspects of the total society's 'cultural identity'. Within societies, different social groups define themselves by the nature of the belief systems and values (social representations) which they adopt and reproduce.

Primarily, social representations theory stresses the inter-connectedness of the individual and society. Further, it emphasises the social origins and nature of knowledge. While social representations theory shares some of the concerns of mainstream research in social cognition, it also offers a means to extend and improve upon the latter by adding a much needed social context. Indeed, as I became familiar and proficient with the theory of social representations, all kinds of links became apparent between this distinctly European approach and many areas of traditional psychological research. Exploring some of these links is one of the major tasks of this thesis.

Since beginning this thesis, social representations theory has increased its momentum, attracting many researchers outside of the European continent. In particular, the theory has generated considerable interest among British social psychologists. Since completing the research described in this thesis, several social-psychological books have been published of joint British and European efforts which reflect the growing interest in collective and societal issues. Some of these include Fraser and Gaskell's (1990) edited volume on *The Social Psychological Study of Widespread Beliefs*, Himmelweit and Gaskell's (1990) edited collection on *Societal Psychology*, and Hewstone's (1989) book on *Causal Attributions: From Cognitive Processes to Collective Beliefs*. All three books contain a common thread

which reflects an interest in how the wider society influences the cognitive contents of the individual mind, or how the social and collective features of a society are contained within individual human thought. A conceptual theme which recurs throughout these books is the adoption of social representations theory as 'the' theoretical framework for the study of widespread beliefs, societal psychology and collective processes. I hope the research contained in this thesis contributes to this trend.

INTRODUCTION.

Overview of the Thesis.

This thesis is divided into three major parts. Part I contains Chapters 1, 2, 3 and 4. Chapter 1 of the thesis begins by sampling some of the major criticisms which have been levelled at the discipline of social psychology over the last three decades. Some of these critiques are central in understanding the nature and purpose of social representations theory, for it was amongst this background of discontent that social representations theory emerged and took shape. The desire by some researchers for a more 'social' social psychology has contributed to the interest the theory has attracted within and outside the European continent. The theory, however, is still a long way from making inroads into the mainstream of American social psychology.

The primary purpose of the first chapter, however, is to outline the basic tenets of social representations theory, as detailed by Moscovici in three major articles published in 1981, 1984 & 1988. This includes detailing the phenomenal aspects of the theory which define social representations as socially created, shared and communicated branches of knowledge which people construct to organise and understand aspects of everyday social reality. The processes by which social representations are generated are also described. In addition to the phenomenal theory, the meta-theory of Moscovici's writings on social representations is also outlined. The meta-theory comments on the nature of reality and the status of knowledge in scientific thinking and everyday lay thinking.

Chapter 1 also reviews some representative examples of empirical research in the social representations tradition. This includes exploratory and descriptive studies on the social representations of health and illness (Herzlich, 1973; De Rosa, 1984), and the representations of social groups (Hewstone, Jaspars & Lalljee; 1982, Di Giacomo, 1980). In contrast to these descriptive studies, Abric's (1984) and Codol's (1984) studies are presented as examples of experimental laboratory research within the social representations tradition. Finally, this chapter reviews some of the critical evaluations to which social representations theory and research has been subjected.

A central feature of some of these critiques is that the concept of social representations bears strong similarities to several other social-psychological constructs, such as attitudes, belief systems, ideology and values. While the conceptual similarities between Moscovici's concept and these constructs are undeniable, it is argued that Moscovici places the concept of social representations within a theoretical framework which is unique, and which challenges some of the 'accepted' and traditional ways social psychologists have understood and researched these concepts. Throughout the thesis, connections between social representations and other conceptual frameworks will be highlighted, with the purpose of demonstrating how social representations theory can add a wider social dimension to more mainstream approaches.

This is the central aim of Chapter 2, which examines the conceptual similarities between social representations theory and social schema models. Schema models have become very popular within mainstream social cognition research, and have come to dominate our understanding of the ways in which social information is processed and acted upon. Despite advances made within social schema research, it remains a highly individualistic and mechanistic account of the way in which people understand the social world. By emphasising the shared and interactional nature of social knowledge, social representations theory has the potential to revolutionise the social schema approach by contributing a much needed social perspective. Chapter 2 essentially compares the theoretical approaches, documenting the points of similarity between the two but also the important divergences between the two theories. Both approaches remain distinct at present and, many would say, contradictory. The aim of chapter 2 is to reconcile these divergent traditions or, at the very least, to attempt a preliminary articulation between these different explanatory models for the phenomenon of internalised social knowledge.

Chapter 3 details an empirical study which illustrates the utility of forging links between the concepts of social representations and social schemata. While social representations are viewed as being collectively shared and as originating and developing via social interaction and communication, schema theory says very little about the social origins and sharedness of internalised social knowledge. Within the social representations literature, the degree and

nature of consensus have not been adequately demonstrated in empirical investigations of social representations. This study investigates the social origins and development of consensual representations of Australian society in two student samples using a multidimensional scaling procedure. Year 9 secondary school students (13 to 14 years old) and university students rated the degree of (dis)similarity between 12 social groups which characterise Australian society. Multidimensional scaling analyses for each sample suggested possible developmental differences in the structural representation of the social groups. The younger sample tended to cluster similar groups together, whereas the adult student sample generated a hierarchical and linear representation of the groups. While both samples contained a fair degree of individual variation in their representations of the groups, this variation decreased considerably with increased age, suggesting an increase in consensual representations of society with increased social development.These findings demonstrate the relevance of both the schema concept and the concept of social representations: the former as a cognitive structure which guides the selection and processing of social information, and the latter as a knowledge structure which is essentially consensual in nature and social in origin.

Chapter 4 extends this empirical work, seeking to substantiate further the above developmental changes in representations of Australian society with increased age. An additional tenet of representations theory is also investigated: the group defining nature of social knowledge. Students from contrasting socioeconomic backgrounds were administered a multidimensional scaling procedure, similar to the one used in the pilot study, to investigate possible social group differences in representations of Australian society. In addition to year 9 students and an adult university sample, an intermediary age group of year 12 students (16 to 17 years) was included so as to trace the development of societal representations more definitively over the course of adolescence and early adulthood. The year 9 and 12 samples were drawn from schools contrasting markedly in status (government and private), but also in the socioeconomic backgrounds of their respective student populations.

The increased sharedness in representations with increased social development (age) was again evident in this study, further substantiating the consensual nature and social origins of representations of society. As in the pilot study, the younger year 9 students from both

schools represented the structure of the social groups in discrete clusters. The year 12 sample from the government school also represented the groups in a clustering formation. The private school students who were from higher socioeconomic backgrounds represented the groups along a rigid socioeconomic class hierarchy, as did the adult university students. These group differences in representations of Australian society are discussed and explained in terms of social identity theory.

The second part of the thesis (Part II) is analytically distinct from the first, but continues to make further links between social representations theory and mainstream concepts in social cognition. Chapter 5 specifically focuses upon the interconnections between attribution theory and social representations. It is argued that social representations theory can provide a theoretical context for determining the social origins of attributions. Where do lay explanations for various societal and individual events come from if not from the stock of common knowledge and widespread beliefs within a collectivity? This social knowledge therefore, forms the basis upon which attributions are made.

At another level, chapter 5 also makes theoretical connections between social representations and the existence of 'dominant', or widespread beliefs and values which ultimately contribute to the legitimacy and social cohesion of a society. This is explored with particular reference to individualism as a consensual mode of thinking in western societies. Various strands of the psychological and sociological literature are reviewed, providing ample demonstration of the pervasiveness of individualism as a consensual representation, which mediates the way people view and understand aspects of everyday social reality. Finally, similarities are emphasised between social representations theory and sociological theories which attempt to explain the historical reproduction of dominant representations within western societies.

Chapter 5 forms the conceptual and theoretical background for the research presented in the subsequent chapter. Chapter 6 is an empirical investigation of the dominance of individualist (internal) attributions for success and failure amongst secondary school students. It was expected that individualist explanations would become more dominant with increased age. The study is conducted using approximately half of the Year 9 and 12 students

from the two schools who took part in the MDS exercise detailed in chapter 4. The students were asked to read 12 vignette descriptions of school candidates sitting for exams. The vignettes described students from different social backgrounds representative of the social groups which were previously scaled in the MDS analysis. Students were asked to attribute the success or failure of the candidates to ability, effort, task difficulty and luck. The first two explanations refer to internal factors which are individualistic in nature, whereas the last two can be referred to as external attributional factors. It was expected that students would make differential attributions for success and failure on the basis of the social category description of the candidates. Social class differences in these differential attributions were also anticipated.

Consistent with expectations, internal attributions (effort and ability) were significantly more favoured than external attributions for both success and failure. Furthermore, this individualist 'bias' increased with age. This result is consistent with the social representations literature which suggests that the emphasis on internal attributions in western cultures is not a universal cognitive error or bias, but reflects an underlying individualist ideology or representation of the person as the centre of all action and process. Moreover, social categorisation effects indicated that students were more likely to attribute success and failure to external factors for groups at the lower end of the social structure, and to internal factors for groups at the higher end of the social structure. Inconsistent with expectations were the few significant school or social class differences in responses. The data generated by this study are further analysed with reference to the 'ingroup/ outgroup' literature which suggests an attributional bias in favour of the ingroup.

Part III of the thesis continues the theme of social representations of Australian society, but in a methodologically contrasting way to the empirical work in chapters 3, 4 and 6 of the thesis. Chapters 3 and 4 were concerned with investigating the development of representations of Australian society via respondents' comparisons and judgements of different social groups constituent of society. Chapter 6 extended this analysis by considering how attributions of academic success and failure are influenced by the representations people have of the actor's social group membership. Chapter 7 extends the analysis of

representations of Australian society and its constituent social groups through the analysis of a natural occurring social event, the celebration of Australia's Bicentennial birthday in January 1988. This study consists of investigating the content of a representation of Australian society which was depicted on a television advertisement encouraging the public to join in the national celebrations.

Subjective impressions of the advertisement were ascertained from a sample of first year psychology students. Subjects viewed the advertisement and responded to both open-ended and closed questions regarding the imagery and emotion contained in the advertisement. Two groups of psychology students were exposed to a different evaluative introduction before viewing the advertisement (negative, positive) and a third group was shown the message with no introduction. One of the aims of the study was to determine whether the evaluative context in which the message was viewed influenced the elicited cognitive and affective responses of the subjects. However, few experimental group differences were found. Overall, the majority of the sample evaluated the advertisement positively and indicated that it evoked predominantly positive emotional reactions. Open-ended responses indicated that one of the dominant themes contained in the advertisement was the unity and togetherness of the Australian people. This was often coupled with the imagery of the social diversity of Australian society. Many subjects demonstrated a significant degree of ambivalence towards this national event. These contradictory elements of the representation are explored in terms of their relevance for ideas about the structure and internal organisation of social representations. Subjects were also administered a questionnaire designed to tap more general attitudes towards the bicentenary celebrations. Lastly, an MDS exercise was administered comparing the 12 social groups used in the previous studies of this thesis. Given the dominant message of the bicentenary advertisement of unity between different groups of people, it was expected that the perceived social distance between the 12 social groups may be reduced after exposure to the advertisement. This was found to be the case for the group of subjects who viewed the advertisement with no evaluative preface (neutral condition).

Finally, the concluding chapter of this thesis suggests that all the theoretical and empirical investigations within this thesis can be extended by considering social identity processes as

important mediating and/ or explanatory constructs. Thus important links can also be made between Moscovici's theory and the work of Tajfel in social identity theory. Suggestions for further empirical and theoretical research in social representations are presented from within the social identity perspective.

PART 1

Chapter 1

Social Representations: Theory, Research and Critique.

The 'Crisis' in Social Psychology.

Since the late 1960s, social psychology journals have been deluged with papers expressing a 'crisis of confidence' in the discipline (Cartwright, 1979, Elms, 1975, Gergen, 1973, McGuire,1973, Pepitone, 1976; 1981, Ring, 1967; Sampson, 1977, 1981, Steiner, 1974, Tajfel, 1972, Taylor & Brown, 1979). The enthusiasm with which an earlier experimental social psychology was met became dampened by critics who described a general feeling of discontent with the discipline's course of direction. Early expressions of discontent were related to the fetishism of laboratory experimentation which deliberately isolates itself from the 'contaminating variables' of the real world. It was argued that the artificiality of this contrived environment does not and could not adequately simulate human social experience. Furthermore, experimentation led to its own class of problem, such as demand characteristics (Orne, 1969) and experimenter bias (Rosenthal, 1969). Other possible sources of bias were identified, such as the political ideologies, cultural backgrounds and biographical characteristics of researchers (Innes & Fraser, 1971).

On a more epistemological level, Gergen (1973) claimed that social psychology could never be a science because the subject matter with which it deals (human social behaviour) is largely culturally and historically specific. Unlike the physical sciences, general laws of human behaviour cannot be established definitively, because these fluctuate with changing cultural and historical circumstances. Social psychology is, therefore, predominantly an 'historic inquiry'. For some, the location of the crisis was in the unchallenged epistemological assumption that the individual is 'the centre of all things', and thus should be the principal unit of research and analysis. In particular, Hogan and Emler (1978), Pepitone (1976, 1981), and Sampson (1977) argued how most of social psychology's theories (dissonance theory, game theory, equity theory, attitude theories, and theories of personality and socialisation) are imbued with the thesis of self-contained individualism. Given the preponderance of individualism as an ideological doctrine in American life, and the fact that social psychological research was largely a North American intellectual endeavour, it was argued that social psychological theories merely reflected the cultural, political and ideological values of American society.

The individualisation of social psychology has also been attributed to the joint forces of experimentation and positivism which came to dominate the discipline and cloak it in scientific respectability. These forces also led to the demise of interest in collective phenomena with which early psychologists such as Wundt and McDougall had been interested (Farr, 1989). Along with the sociologist Durkheim (1898) these early psychologists believed that cultural phenomena such as language, myths, religion, and nationalism could not be reduced to the individual level of analysis. In particular, Wundt believed that such higher cognitive processes could not be adequately studied by the experimental tradition which he founded.

The conflict and tension between the individual (psychological) and collective (sociological) levels of analysis has had a long history and is documented in the famous debate between Tarde and Durkheim (Doise, 1986). Those who have provided a critical history of social psychology are in agreement that the dominance of the former tradition over the latter can partly be attributed to the behaviourist views of F. H. Allport who was highly critical of collective concepts such as McDougall's notion of 'group mind' (Cartwright, 1979, Farr, 1989, Graumann, 1986, Pepitone, 1981). Allport's methodological individualism is contained in his famous statement: "There is no psychology of groups which is not essentially and entirely a psychology of the individual. Social psychology . . . is a part of the psychology of the individual" (Allport, 1924, p. 4). Allport was insistent that collective phenomena such as crowd behaviour and public opinion were nothing more than the sum total of actions and attitudes of the individuals who comprise the collectivity. Allport's methodological individualism was a powerful force which helped shape the subsequent nature of the most dominant theories and methods in North American social psychology[1]. In Graumann's view (1986), this not only led to the 'individualisation of the social' but also to the 'desocialisation of the individual'.

The consequences of Allport's individualism have been well illustrated by Jaspars and Fraser (1984) in the area of attitude research. In documenting the history of the attitude concept, these authors note the shift in the concept of attitude as being socially shared and

group defining in nature, to the idea that an attitude is an individual cognitive and emotional construct (see also Gaskell & Fraser, 1990).

Serge Moscovici has been a long time critic of the individualised and decontextualised nature of contemporary social psychology (Moscovici, 1963, 1972). In his 1972 critique of mainstream social psychology, Moscovici argues,

"The central and exclusive object of social psychology should be the study of all that pertains to *ideology* and to *communication* from the point of view of their structure, their genesis and their function. The proper domain of our discipline is the study of cultural processes which are responsible for the organisation of knowledge in a society, for the establishment of inter-individual relationships in the context of social and physical environment, for the formation of social movements (groups, parties, institutions) through which men [sic] act and interact, for the codification of inter-individual and intergroup conduct which creates a common social reality with its norms and values, the origin of which is to be sought again in the social context" (pp 55-56).

Moscovici's theory of social representations emerged largely as a result of such concerns, and began to develop and flourish amidst calls for a more 'social' social psychology. The theory of social representations has as its imperative to reintroduce a social focus to the study of social psychology by reinstating the primacy of collective concepts such as culture and ideology. It seeks to understand individual psychological functioning by placing the individual in his or her social, cultural and collective milieu. The theory views psychological experience as being mediated and determined by the individual's belongingness to a collectivity of others who share similar views, experiences and a common environment and language. Unlike the atomistic notion of the individual which characterises most theories of social psychology, social representations theory begins with the premise that the individual is primarily and foremost a social being whose own existence and identity is rooted in a collectivity. It therefore attempts to understand how higher level social processes impinge upon and influence the social psychological functioning of individuals and groups. Social representations theory, however, does not juxtapose the individual and society, but rather sees the former in a dialectical relationship with society, both as a product of society (its conventions, norms and values) and an active participant who can effect change in society.

Social Representations Theory:

<u>Definition of Social Representations.</u>

The concept of 'representation' has had a long history and spreads across a number of interrelated disciplines in the social sciences. Moscovici draws on diverse sources when explicating the theory of social representations. This ranges from the anthropological work of Lévy-Bruhl which is concerned with the belief systems (collective representations) of 'primitive societies', to Piaget's work in child psychology which attempts to unravel another kind of 'primitive' thought - that of the child's understanding and representation of the world (Moscovici, 1988). The most important influence on Moscovici's theory, however, is Durkheim.

Moscovici initially based the concept of social representations on Durkheim's notion of 'collective representations' (1898). Durkheim used this concept to differentiate collective thought from individual thought. Collective representations were seen by Durkheim to be widely shared by members of a society, to be social in origin and generation, and to be about society. Although he regarded representations as emerging from a 'substratum' of individuals, he strongly maintained that they could not be explained at the individual level. Instead, collective representations such as myths, legends and traditions were phenomena with their own distinctive characteristics, independent from the individuals who expounded them, which required explanation at the sociological or societal level (Lukes,1975).

For Moscovici, social representations refer to the ideas, thoughts, images and knowledge which members of a collectivity share: consensual universes of thought which are socially created and socially communicated to form part of a 'common consciousness'. Social representations refer to the stock of common knowledge and information which people share in the form of common-sense theories about the social world. They are comprised of both conceptual and pictorial elements. Through these, members of a society are able to construct social reality. Moscovici has defined social representations thus;

> ". . . social representations are cognitive systems with a logic and language of their own . . . They do not represent simply 'opinions about', 'images of' or 'attitudes towards' but 'theories' or 'branches of knowledge' in their own right, for the discovery and organisation of reality . . . " (Moscovici, p. xii in foreward to Herzlich, 1973).

"Social representations . . . concern the contents of everyday thinking and the stock of ideas that gives coherence to our religious beliefs, political ideas and the connections we create as spontaneously as we breathe. They make it possible for us to classify persons and objects, to compare and explain behaviours and to objectify them as parts of our social setting. While representations are often to be located in the minds of men and women, they can just as often be found 'in the world', and as such examined separately" (Moscovici, 1988, p. 214).

As evidenced by the above quotes, the primacy of the cognitive is an important defining feature of the theory. Human thought is regarded as an 'environment' - always present and enveloping. Representations are hypothesised to mediate and determine cognitive activity, giving this activity its form and meaning.

Social representations range from hegemonic structures that are shared homogeneously by a society or nation to differentiated knowledge structures that are shared by subgroups within a collectivity (Moscovici, 1988). The former are highly coercive and prescriptive through their continual historical reproduction and are akin to Durkheim's original notion of 'collective' representations'. Collective representations are more characteristic of small traditional societies, such as the witchcraft belief system among the Azande (Evans-Pritchard, 1976). Hegemonic representations are more difficult to locate within heterogeneous societies. The individualist conception of the person as the centre of cognition, action and process could be said to be such a collectively shared representation which permeates most aspects of thinking within western industrialised societies (Lukes, 1973).

Moscovici's concept of 'social' representations is differentiated from Durkheim's 'collective' representations in that the former emphasises the dynamic and changing nature of representations ("social life in the making") and also takes into account the array of differentiated knowledge shared by subgroups within contemporary western societies (Moscovici, 1988, p. 219). Like Durkheim, Moscovici argues that social psychology's primary task is to study the origins, structure and inner dynamics of social representations and their impact on society; that is, to study the nature of a 'thinking society' (Moscovici, 1984). Just as society can be considered to be an economic and political system, so also should it be viewed as a 'thinking system' (Moscovici, 1988). Social psychology should

therefore concern itself with the nature of a 'thinking society' and become an "anthropology of the modern culture" (Moscovici, 1989, p.34).

The role of representations is to conventionalise objects, persons and events, to locate them within a familiar categorical context. Representations are also prescriptive in nature: determined by tradition and convention, representations impose themselves on our cognitive activity. Often we are unaware of these conventions, so that we remain unaware of the prejudices and social determination of our thought, preferring to view our thoughts as 'common sense'. Indeed, Moscovici has likened the study of social representations to the study of common-sense, making this approach very similar to that of Berger & Luckmanns' (1967) on the social construction of reality.

> "By social representations we mean a set of concepts, statements and explanations originating in daily life in the course of inter-individual communications. They are the equivalent, in our society, of the myths and belief systems in traditional societies; they might even be said to be the contemporary version of common sense" (Moscovici, 1981, p. 181).

In addition to their consensual nature, what makes representations social is their creation and generation, through social interaction and communication by individuals and groups? Social representations originate from social communication and construct the understanding of the social world, enabling interaction within groups sharing the representation. The theory's clear imperative is the need to study social communication and interaction as the <u>sine qua non</u> of social cognition.

Unlike Durkheim, whom Moscovici argues has a rather static conception of representations, Moscovici emphasises the plasticity of representations, characterising them as dynamic structures. " . . . there is a continual need to reconstitute 'common sense' or the form of understanding that creates the substratum of images and meanings, without which no collectivity can operate" (Moscovici, 1984, p.19). Once created, representations behave like 'autonomous entities' or 'material forces'.

> "...they lead a life of their own, circulate, merge, attract and repel each other, and give birth to new representations, while old ones die out . . . being shared by all and strengthened by tradition, it constitutes a social reality sui generis. The more its origin is forgotten, and its conventional nature ignored, the more fossilised it becomes. That which is ideal gradually becomes materialized" (Moscovici, 1984, p.13).

Central to Moscovici's concept of social representations are the two processes that generate these representations: anchoring and objectification. These are the processes by which unfamiliar objects, events or stimuli are rendered familiar. The purpose of all representations is to give the unfamiliar a familiar substance. Moscovici accords primary importance to the need for individuals to make sense of and grasp the nature of an unfamiliar object, because that which is foreign and alien is threatening and frightening. People make sense of that which is unfamiliar by giving it meaning, and the role of representations is to guide this process of attributing meaning. People search for meaning amongst what they already know and with which they are familiar.

> " . . . the images, ideas and language shared by a given group always seem to dictate the initial direction and expedient by which the group tries to come to terms with the unfamiliar. Social thinking owes more to convention and memory than to reason; to traditional structures rather than to current intellectual or perceptual structures" (Moscovici, 1984, p. 26).

Anchoring:

Anchoring refers to the classification and naming of unfamiliar objects or social stimuli by comparing them to the existing stock of familiar and culturally accessible categories. In classifying, we compare to a prototype or model, and thus derive a perspective on the novel stimulus by determining its relationship to the model or prototype. When we compare, we either decide that something is similar to a prototype, i.e., we generalise certain salient features of the prototype to the unfamiliar stimulus, or we decide that something is different, i.e., we particularise and differentiate between the object and the prototype. If we decide in favour of similarity, the unfamiliar acquires the characteristics of the model. Even when discrepancy exists, the object is readjusted so as to fit the defining features of the prototype. Thus classifying and naming always involves comparisons to a prototype.

> "The ascendancy of the test case is due . . . to its concreteness, to a kind of vividness which leaves such a deep imprint in our memory that we are able to use it thereafter as a 'model' against which we measure individual cases and any image that even remotely resembles it" (Moscovici, 1984, p. 32).

Moscovici refers to the assignment of names and labels in our culture as a 'nominalistic tendency'. The process of naming someone or something takes on a solemn significance. It

imbues that which is named with meaning, and thus locates it within a society's 'identity matrix'. Only then can the object be represented. "Indeed representation is, basically, a system of classification and denotation, of allotting categories and names". Thus, representations are reflected in the way we classify and allot categories and names to stimuli because, by classifying or categorising, we are, in essence, revealing our conceptual frameworks, "our 'theory' of society and of human nature" (Moscovici, 1984, p. 30). By classifying and naming an object, we are not only able to recognise and understand it but also to evaluate it, either positively or negatively, or view it as normal or abnormal. Thus "...naming is not a purely intellectual operation aiming at a clarity or logical coherence. It is an operation related to a social attitude" (Moscovici, 1984, p. 35).

Objectification:

Objectification is the process by which unfamiliar and abstract notions, ideas and images are transformed into concrete and objective common-sense realities. "To objectify is to discover the iconic quality of an imprecise idea or being, to reproduce a concept in an image" (Moscovici, 1984, p. 38). Eventually, "the image is wholly assimilated and what is perceived replaces what is conceived .... Thus by a sort of logical imperative, images become elements of reality rather than elements of thought" (Moscovici, 1984, p. 40).

The proposition that ideas or images are transformed into material forces which shape and constitute reality is, again, very similar to Berger & Luckmanns' (1967) views on the social construction of reality. Many scientific and technological concepts undergo such a transformation as they disseminate into everyday lay usage and discourse. Moscovici's (1961) own research on the diffusion of psychoanalytic concepts throughout sections of French society is essentially a study of the objectification process. Moscovici was able to show how lay people adopted Freudian notions such as 'complexes' and 'neuroses' and used them to explain their own behaviour and the behaviour of others. In the process of this usage, these conceptual and analytic categories were transformed into objective entities with physical properties rendering them with an independent existence. So, abstract constructs such as 'mind' or 'ego' are perceived as physical entities, and 'complexes' and 'neuroses'

are construed as objective conditions that afflict people. This process of objectification may be seen to be akin to that of the metaphor, whereby any new phenomenon may be accommodated in terms of its similarity to the already known (cf Lakoff & Johnson, 1980).

As Moscovici & Hewstone (1983) point out, the diffusion and popularisation of scientific concepts throughout society is occurring at a rapid rate through mass media communications. Thus, the lay public can be regarded as 'amateur' scientists (e.g., when talking about the greenhouse effect), 'amateur' economists (e.g., discussions about the current accounts deficit and the general state of the economy abound in Australia), 'amateur' psychologists (ideas about how to keep happy, discipline children, etc.), 'amateur' doctors (concerns about the threat of AIDS, stress-related illnesses, etc.). Most of this knowledge becomes an integral part of mass culture and, ultimately, what will come to be regarded as 'common sense'.

Furthermore, Moscovici & Hewstone (1983) describe the three external processes by which knowledge is transformed into common sense or a social representation: the personification of knowledge, figuration and ontoligising. Firstly, the personification of knowledge links the idea, theory or concept to a person or group; e.g., Freud and psychoanalysis, or Friedman and monetarism. The association of an idea to a person gives the idea a concrete existence. Secondly, figuration is the process by which an abstract notion is embodied or dominated by a metaphorical image so that, again, what is conceptual is made more accessible or concrete. For example, Hewstone's (1986) study on social representations of the European Economic Community found that people used metaphorical language and images which had originated in the media, such as milk 'lakes' and butter 'mountains' when referring to food surpluses of the community. More recently, the 'Gulf War' (1990-91) engendered many graphic metaphors which originated in the media. A prime example was the description of hostages in Iraq before the onset of the war as Hussein's 'human shields'. Thirdly, ontologising is the process by which a verbal or conceptual construct is imbued with physical properties as in the above examples of abstract concepts such as 'mind' or 'neurosis' being construed as material phenemena. These three processes all contribute to making highly specialised and technical knowledge more

accessible to the lay community so that communication about this knowledge is able to take place.

The Consensual and Reified Universes:

There are two distinguishable theories contained within Moscovici's writings: the phenomenal theory and the meta-theory (Wells,1987). Thus far, only the phenomenal theory has been detailed which describes the phenomena of social representations as socially and culturally conditioned ways of understanding everyday reality and the processes by which they are generated: anchoring and objectification. The meta-theory refers to the assertion by Moscovici that there are two distinct and different types of reality: the reified and the consensual universes: the world of science and the world of common sense. The transformation of expert knowledge into common sense marks the distinction Moscovici makes between the reified and consensual universes. The consensual universe is comprised of social representations which are created, used and reconstituted by people to make sense of everyday life. The reified universe is one which the expert scientist inhabits - one in which the scientist subjects reality to rigorous scrutiny and experimentation. The laws of science govern the reified universe in which human thinking takes a logical and rational form. Moscovici argues that it is the consensual universe with which social psychologists should be interested: how ordinary people create and use meaning to make sense of their world. Moscovici writes,

> "It is readily apparent that the sciences are the means by which we understand the reified universe, while social representations deal with the consensual. The purpose of the first is to establish a chart of the forces, objects and events which are independent of our desires and outside of our awareness and to which we must react impartially and submissively. By concealing values and advantages they aim at encouraging intellectual precision and empirical evidence. Representations, on the other hand, restore collective awareness and give it shape, explaining objects and events so that they become accessible to everyone and coincide with our immediate interests" (1984, p.22).

As will be discussed later, this is a particularly traditional but naive view of the scientific production of knowledge, a view which has increasingly begun to be criticised by those interested in the sociology of scientific knowledge.

The increasing proliferation of science and expert knowledge endows the reified universe with considerable significance in the modern world. This expert knowledge is transformed or re-presented and appropriated in the consensual universe so that it is made more accessible and intelligible. This re-presented version eventually takes form and contributes to the stock of common-sense knowledge which people draw upon to understand social reality. Lay people reduce complex ideas and theories to a 'figurative nucleus' of images and concepts to re-present this knowledge in a more simplified and culturally accessible form.

The case of psychoanalysis has already been discussed. Moscovici & Hewstone (1983) also discuss the transformation which the theory of hemispheric specialisation underwent when popularised in the consensual universe. Most lay people, through the popular press and media, have been introduced to the notion that the left hemisphere is believed to specialise in logical, rational and analytic thinking, while the right hemisphere is said to engage in more intuitive, emotional and subjective functions. This cerebral dualism, which originated in the reified universe of neuroscience, was used by people and the popular press to explain a wide range of opposing cultural tendencies in human behaviour, such as femininity versus masculinity, rational versus intuitive thought. The split brain view has proliferated so widely that it is now endowed with an objective reality and has become part of common-sense knowledge: a social representation.

"Once a society has adopted such a paradigm or figurative nucleus it finds it easier to talk about whatever the paradigm stands for, and because of this facility the words referring to it are used more often. Then formulae and cliches emerge that sum it up and join together images that were formerly distinct. It is not simply talked about but exploited in various social situations as a means of understanding others and oneself, of choosing and deciding" (Moscovici, 1984, p. 39).

Empirical Research in the Social Representations Tradition:

Not surprisingly, several criticisms have been levelled at Moscovici's concept, including debate as to whether social representations indeed constitutes a 'theory' (see Potter & Litton, 1985, and replies by Hewstone, 1985; Moscovici, 1985; Semin, 1985). Jahoda's (1988) reservations about the status of the theory of social representations rest on

the question of its distinctiveness from other allied concepts such as attitudes, ideology, culture or belief system. There is little doubt that the concept of social representations has a strong affinity with these concepts, and it could be argued legitimately that the concept is simply 'old wine in a new bottle'. What Moscovici's theory has done, however, is to reintroduce neglected collective concepts in the social psychological agenda as legitimate and important areas of research.

More recently, attempts have been made to delineate the relationship between the concept of social representations and other allied concepts (Fraser & Gaskell, 1990). Indeed, subsequent chapters will explore points of convergence between social representations theory and concepts which are currently having a large impact on social cognition research, particularly the concepts of schemata and attributions. What distinguishes the concept of social representations from the traditional treatment of concepts such as values, belief system and ideology, is that it has been presented within a theoretical social-psychological framework. The latter concepts, while frequently referred to within the social psychological literature, have not been contextualised within any over-arching theory. As previously mentioned, what empirical research has been done on ideology, values, beliefs, etc., has focused on measuring variability in these domains, treating them more as personality variables or constructs and, therefore, essentially as individual phenomena (e.g., Eysenk & Wilson, 1978, Rokeach, 1960)[2]. The same can be said about the concept of attitude in traditional social psychological theory. Notable is the very different epistemological status some of these concepts have within the disciplines of sociology and anthropolgy. Thus social representations theory attempts to deindividualise these concepts and reinstate their collective character within an integrated social psychological theory (Jaspars & Fraser, 1984).

Specific criticisms of the theory will be detailed in the next section, but it needs to be emphasised at this point that many critics have argued that the concept is vague and loosely defined, and that the theory is too abstract in nature and therefore difficult to translate empirically. The vagueness of the concept and its associated corollaries, in fact, is what Moscovici sees as a welcome strength, having a positive role to play in the conduct of

research. Moscovici argues that prescriptive definitions and formulae for conducting research stifle the creative generation of ideas. Social representations theory is not at the stage of development where predictive experimental hypotheses can be formulated but, far from viewing this as a problem, Moscovici (1985) prefers to see the generation of data and theories via descriptive and exploratory research.

As Semin (1985) points out, the elusiveness surrounding Moscovici's concept is, to some extent, unavoidable, given the inherent difficulties of studying social-psychological phenomena at the collective level as compared to the traditional individual level of analysis. Critics' objections to social representations research are not only related to the notion itself but also to Moscovici's perhaps laissez faire approach to the methodology that is to be utilised for such research. The use of a wide range of methodologies is needed to translate empirically Moscovici's notion of a 'thinking society'. To date, empirical investigations have ranged from the experimental (Abric, 1984; Codol, 1984) to interview (Herzlich, 1973), exploratory and descriptive techniques (Di Giacomo, 1980). Indeed methods other than the conventional positivist experiments are encouraged and favoured, since the very nature of collective phenomena makes them difficult to be researched adequately in a laboratory setting alone (Farr, 1989).

The intention of this section is to survey empirical studies which are representative of the social representations tradition. It does not intend to document definitively the empirical research to date, for this is quite extensive and covers many content areas. Rather, this section is designed to give a flavour of the kinds of representations studied thus far, and to illustrate the range of methodologies which have been used to research this elusive concept. Further emprical studies will be referred to and documented throughout the subsequent chapters of this thesis.

Herzlich (1973) on Representations of Health and Illness:

One of the most widely cited studies in the social representations literature is Herzlich's (1973) study on the representations of health and illness in France in the 1960s. An open interview method was used, but this was structured around themes which were found to be

important in a pilot interview study of 20 subjects. Eighty subjects were interviewed, half of whom were classified as professional people, the other half as middle class. Most of the respondents lived in Paris, and 12 lived in a small village in Normandy. Herzlich emphasises the importance in the choice of using an open interview method as the only suitable technique of allowing respondents the freedom to express their views, feelings and accounts of behaviour related to the notions of health and illness.

One of the most dominant and recurring themes that Herzlich found was the view that the urban way of life is a primary determinant in the genesis of illness. Many respondents described how city life resulted in fatigue and nervous tension. This state, in turn, made the individual less resistant and more vulnerable to disease and illness. Mental disorders, heart disease and cancer were illnesses most frequently referred to by respondents as being generated by the way of life. While the external environment, that is, urban life, was the most important causative agent in illness, internal factors such as the individual's predisposition, constitution and temperament were thought to determine whether individuals are able to resist or defend themselves from the onset of illness.

Illness was seen to be generated by the external environment; the individual was seen as representing the source of health. Illness was not viewed as an inherent part of the individual, but as something external to him or her. Thus health and illness were seen to be the outcome of struggle and opposition between the passive individual and an active factor, the way of life.

Respondents described urban life as being both unhealthy and constraining. The quality of food in the cities was viewed with suspicion, the air and water viewed as being contaminated with pollutants. Two-thirds of the sample referred to the notion of toxicity. Surprisingly, only half of the sample referred to the more popularised notion of germs. Toxicity referred to the ingestion and retention of harmful substances in the food, air and water. It was regarded as a cumulative process which was dangerous in the long run. Noise and the rhythm of life in cities were seen as constraining. These negative aspects of urban life were seen as being imposed upon the individual who is powerless and helpless to change the situation. Frequent references were made to healthier ways of life, such as life in

the country where food, water and air are cleaner and the pace and rhythm of life are slower

and calmer. Technology and the products of human activity were equated with all that was

regarded as unhealthy and artificial.

> "If illness arises from a conflict between the individual and society, the
> unhealthy arises in the last resort from the antagonism perceived to
> exist between what is felt to be the nature of man and the form and
> product of his activities" (Herzlich, 1973, p. 38).

Herzlich concludes that the representation of health and illness seems to be structured

around a number of opposing concepts: internal versus external, healthy versus unhealthy,

natural versus unnatural, the individual versus society.

Health and illness are not treated as unitary concepts by the respondents, but as

complex entities. The 'state' of health was described by respondents in a number of ways.

Health could be experienced as an absence of illness in which people are not even aware of

being in good health because they are preoccupied with daily activities. There could also be

an awareness of good health - the presence of physical well-being and robustness.

Interestingly, Herzlich describes how most of the respondents referred to a state of

'equilibrium'. This notion was vaguely and obscurely defined by respondents, even though

there appeared to be an immediate understanding and recognition of this state. Explicit was

the idea that people 'know' when they are in equilibrium or when they have lost it. It is an

autonomous experience which does not require comparison with others for validation. The

following themes characterised the state of equilibrium: physical well-being, an abundance

of physical resources, absence of fatigue, psychological well-being, evenness of temper,

and good relations with others. It therefore not only refers to physical factors but also to

psychosocial elements in a person's life.

Compared to health, the experience of illness was treated in a more complex manner.

Respondents made a major distinction between accidents and illness. Many categorisations

and classifications were used to differentiate illnesses, but these were applied in a

haphazard way. Indices of classification included severity, whether or not it was painful,

duration and nature of onset. The interesting feature about the indices is their non medical

character. Illnesses were not categorised along organic, anatomical or physiological

attributes, as they are usually by doctors. Instead, respondents used attributes which conveyed information about the degree and ways in which the illness affects the life of the individual. People used predominantly a personal frame of reference when classifying illnesses. This was how various illnesses acquired their meaning and shape. People spoke of illness in terms of the extent of interruption in the daily activities and role responsibilities of the individual. The real criterion of illness was not its inherent anatomical or physiological character, but the level of inactivity and disruption it held for the individual. For many, inactivity was regarded as the most important feature of illness, even more important than pain. Mood and personality changes were thought to be associated with disruption to normal life. Thus, as with health, behavioural criteria are important in defining illness. The experience of illness, therefore, acquires meaning through its effects on the individual's daily life, role obligations and relations with others.

In addition to the states of health and illness, people often described an intermediate state: a warning stage which precedes illness. This is characterised by nagging 'little troubles', such as headaches throughout the day and not wanting to get out of bed in the morning. The experience of fatigue, coupled with depression, anxiety and agitation, was referred to commonly. This intermediate state was said to be common and sometimes permanent, though it was not considered as normal.

Herzlich concludes that the the stable conceptual framework of the representation of health and illness in her study was structured around the individual and society dichotomy. Health is seen as a subjective experience which allows individuals to be integrated in their society and to participate and fulfil their role obligations. On the other hand, illness, through inactivity and disruption, results in exclusion from society. Thus the subjective states of health and illness acquire meaning through the social behaviour of the healthy and the sick person.

Herzlich's research has been treated as a milestone in social representations research, not merely for the contents of its findings but also for the use of a qualitative methodology advocated by critics of mainstream experimental research. Farr (1977) approvingly cites Herzlich's research as an example of the collection of 'naive unnegotiated accounts'

advocated by Harre and Secord (1972). However, Farr also emphasises the problems associated with eliciting lay accounts from respondents and accepting the accounts at 'face value'. Farr argues that the result obtained by Herzlich, mainly that illness was equated with society and health with the individual, is an 'attributional artifact' and is common when people are asked to discuss favourable outcomes (health) as compared to unfavourable outcomes (illness). This is because the former are usually attributed to the self and the latter to the environment. Thus the individual (health) and society (illness) dichotomy found in Herzlich's research is an artefact of the 'self serving' bias that attribution theorists have found in more mainstream research contexts (Ross, 1977). Farr suggests that, whenever a research procedure is adopted to elicit accounts of favourable as opposed to unfavourable events, one can predict a priori that respondents' accounts will reflect such an attributional structure.

Another inherent problem with Herzlich's research is the inability of the reader to independently discern to what extent the representations of health and illness were shared by respondents - to what extent the representation is consensual. This is due to the selective nature of the accounts that Herzlich reproduces. The issue of consensuality is not demonstrated convincingly. This is always difficult to do with qualitative research where numbers, frequency data and the like are not presented. Nevertheless, the reader is not left totally convinced that respondents' accounts followed the same pattern, structure and content.

Of course, medical anthropology has traditionally concerned itself with how the experience of health and illness is understood and communicated within cultural collectivities (Evans-Pritchard, 1976, Kleinman, 1980). Similarly, there has been a growing interest in lay conceptions of health and illness within the mainstream of social and health psychology. Social and health psychologists have been motivated to study lay explanations of health and illness for several practical reasons. One of these motivations has been to improve patient compliance to treatment and medication schedules. This has led to interest in the way in which patients construe and understand illness. Lau and Leventhal and their various colleagues have been at the forefront of this research (e.g., Lau, Bernard

& Hartman, 1989; Lau & Hartman, 1983; Meyer, Leventhal & Guttman, 1985). While they refer to their research as 'common-sense representations' of illness, they do not adopt a social representations perspective but, rather, use theoretical models predominant within social cognition research, such as 'scripts', 'schemata' or 'prototypes', to understand the way in which people cognitively organise, structure and understand information about illnesses in general and specific disease processes. Indeed, it will be argued in the following chapter that some components of social representations theory bear strong similarities to these concepts, particularly to the notion of schema. These researchers have used a combination of methods to explore representations of illness including open-ended and fixed questionnaire responses. What distinguishes this research from Herzlich's is the application of sophisticated quantitative analyses to the obtained data.

An interesting extension of Herzlich's study is the work of Pill and Stott (1982, 1985) on concepts of illness causation and responsibility. Their primary motivation for exploring lay explanations of health and illness was the shift in public health policy in Britain from curative to preventive medicine. Herzlich's research already suggested that illness was not directly attributed to the behaviour of the individual, but was seen to be brought about through stress and the role obligations associated with everyday urban life. Pill and Stott explored whether the public accepted the notion of individual responsibility in the maintenance of health, which is explicit in preventive health philosophy. Both studies concluded that, amongst working class women, individual responsibility in the genesis of illness was given lower priority than external factors. Thus lay and public health explanations differed markedly. Like Herzlich, Pill and Stott used semi-structured interviews to elicit responses, but in the latter study they also developed a 'Salience of Life Index' which was used to explore statistical relationships in their findings. Farr's reservations about the ecological validity of the internal-external classification of illness causation can also be directed at Pill and Stott's research but, notably, this distinction is adopted by them principally because inherent in official public health policy was the notion that individuals should take increasing responsibility for their own health. If such a view is

communicated as a health imperative to the public, then it is entirely reasonable to explore whether or not the public shares this view.

Representations of Mental Disorder:

Another research study in the social representations tradition in the health area is De Rosa's (1987) research on the representations of mental illness by Italian children and adults. This research has spanned many years and its interest lies in the richness of the data which has been yielded by the use of both verbal and non verbal methods. De Rosa argues that the social images of madness throughout history yield multifaceted or 'polymorphic' representations of madness. These have been produced by the dialectical relationship between representations originating and emerging from the scientific and legal worlds (the reified universe) and the everyday consensual world which is filled with lay images, beliefs and common understandings of madness. De Rosa argues against the orthodox historical view of madness which sees it as a linear progression from the supernatural possession conception of the mentally ill dominant in the middle ages, to the medicalised and psychotherapeutic conceptions of the present day. Rather, she argues that, from the time of Hippocrates and Plato, there have existed multiple images and conceptions of madness, most of which still remain in our collective awareness.

In a number of studies, De Rosa traces the developmental path, from childhood to maturity, of the social representations of madness. As well as using verbal questionnaire techniques in the form of social distance scales and semantic differentials to elicit these representations, De Rosa also asked her respondents to produce pictorial representations of madness which were content analysed. I will only be detailing her research results utilising the latter (non-conventional) method, not only because of the richness of the data it produced but also to illustrate the range of methodolgies which have been utilised in the empirical work on social representations.

Seven hundred and twenty subjects (children aged between 5 and 16 years and adults of different sex, social class, urban and rural residence) produced 2160 drawings for analysis. Each subject was asked to produce 3 drawings: one of a human figure, a drawing

of a 'madman' (test B), and a drawing 'as' a madman (test C), all of which were coded on various dimensions. It was hoped that test C drawings would stimulate the expression of projective elements which may be inhibited in the drawings of test B. De Rosa compared these drawings with iconographic material such as popular and artistic prints, anthropological and mythological references from various historical periods, in order to investigate core figurative representations which appeared in the subjects' drawings.

In analysing the drawings, De Rosa found that for both chidren and adults the madman was represented as a social deviant, whereas the drawings 'as' a madman (test C) contained magic-fantastic elements. The drawings of the latter ranged from positive connotations of the madman to negative connotations. The former consisted of drawings of clowns, jesters, buffoons and fairies. In some drawings the madman was represented as an 'artist' (e.g., a painter) or 'egg head' (a genius). All of these figures represent an element of expressive freedom. At the negative pole, drawings of devils and monsters predominated. De Rosa argues that it is not difficult to find such representations in historical iconographic material, particularly that which expresses the 'positive' side of madness. These likeable 'madmen' are viewed as escaping from the routine of everyday roles and behaviour, and from the normal bounds of patterns of thought (e.g., the madman in the Tarot cards).

Demonic representations of madness, explicit in some of the drawings, were a common representation in medieval times. Also prototypical were representations of the madman as a monster. The monstrous features varied, but dominant was the theme of human-animal contamination (e.g., cockman, monkey-man, toad-woman). Mythological as well as misshapen figures were also common (e.g., centaur, cyclops, androgynous figures).

Test B drawings, as mentioned earlier, depict elements of deviation rather than the monstrous. These represented the madman as a social outsider. Stereotypic nuclei included individuals with incongruous behaviour, breaking social norms or not behaving appropriately in situational context (e.g., walking with raised umbrella while the sun is shining, undressing in the street, cursing and raving). Other drawings contained deviation in the form of violent and criminalised elements, expressing the stereotype of the mad-

murderer. Western history atests to the dominance of the criminalised representation of madness.

Interestingly, madness as a social deviation was also represented by more contemporary versions of deviant behaviour such as drawings of drug addicts and drunkards. The social dropout was a common representation in the drawings of adolescents. Common also was the depiction of the madman as a tramp, ragamuffin, dirty and dressed in ragged clothes.

While the representation of madness as deviation was common and recurrent, the medicalised representation was not common in the drawings of children or adults. While research using verbal methods finds that, from the age of 8-9 years, the medicalised representation begins to replace the criminalised representation, this linear progression was not evident in the drawings. De Rosa speculates that this may reflect the difficulty of expressing such a representation pictorially. Drawings which contained medicalised elements included drawings of institutionalised people, the organically sick, the physically handicapped, and the cognitively deranged who were subject to delirium or hallucinations. Some drawings also represented madmen as neurotic individuals, obsessed by their own problems, and as depressed people with suicidal and self-injuring tendencies.

De Rosa shows how the range of stereotypic nuclei produced in the drawings by children and adults corresponds to the variety of conceptions of madness found throughout history and within contemporary society. The cognitive formation of stereotypes of madness seems to revolve around the bipolar themes of normal-abnormal, healthy-sick, beautiful-ugly. Psychosocially, these bipolar themes, with their evaluative connotations, are fundamental in the establishment and development of in-group and out-group relations within any society.

The author concludes that the range of images used to represent madness, coupled with the recurring nature of some of these figurative elements throughout history, seems to suggest the existence of universal representative elements of madness illustrating the collective nature of representations of madness.

Outside the social representations tradition there has been a long history of attitudinal research in the mental health area. This has comprised research on public attitudes towards the mentally ill and mental illness in general, attitudes of mental health personnel towards conflicting models of mental illness, and psychiatric patient attitudes to their disorder. Public attitudes and lay definitions of mental problems are important for various reasons. First, people are usually brought to mental hospitals on the basis of such definitions, and it is important to determine at what point a person's behaviour becomes so disturbing or threatening to a group that the normalisation process breaks down and the person is defined as deviant or needing psychiatric help. Secondly, researchers are interested in evaluating how 'well-informed' public opinion is about mental problems, the purpose being to educate the public towards holding more 'enlightened' or 'scientific' views in this area (Rabkin, 1972; Sarbin & Mancuso, 1970). The attitudes of mental health professionals have been seen as important, given their therapeutic interaction with diagnosed patients. Given the various conceptions (representations) of mental disorder, of interest has been the development of attitudinal scales which evaluate the underlying mental health ideologies of psychiatric staff (Cohen & Struening, 1962; Gilbert & Levinson, 1956; Nevid & Morrison, 1980). This has been extended to investigate the underlying mental health models used by patients to understand their condition and disorder (Rabkin, 1972).

Within this latter line of research, mental health representations have been shown to have important behavioural implications for patients. Farina, Fisher, Getter & Fisher (1978) found that subjects who received a disease representation of mental disorder were more likely to adopt a helpless orientation towards therapy than subjects who were exposed to a social learning representation. In a similar vein, Augoustinos (1986) found that psychiatric inpatients who conceptualised their problems as an 'illness' were significantly more likely to adopt a sick role than patients who defined such problems in non-medical (psychosocial) terms. Thus, research outside the social representations tradition has investigated the way in which models, and knowledge about mental disorder which originate in the scientific universe, are adopted by patients to make sense of their situation.

The 'theories', 'models' or 'representations' that they adopt can have important behavioural consequences.

De Rosa's research can be contrasted with attitudinal studies of mental illness by her efforts to elicit, non-verbally, figurative images of mental illness. By comparing and evaluating these with histiographic material, connections are made between her respondents' representations and western society's cultural or collective representations of madness.

Intergroup Representations:

Empirical research has also investigated Moscovici's claim that different categories of people hold different representations of their social world, and that such shared representations are fundamental in establishing group identities (Moscovici & Hewstone, 1983). Hewstone, Jaspars and Lalljee's (1982) study on the different intergroup representational structures held by public and comprehensive schoolboys in England, and Di Giacomo's (1980) research on the different lexicons used by students and the student leaders of a protest movement, will be discussed as studies designed to investigate this claim.

Hewstone, Jaspars and Lalljee's (1982) research attempts to demonstrate the dialectical nature of the relationship between social representations, social identity processes and intergroup attributions. The research was conducted on two groups which have had a history of intergroup conflict in Britain: schoolboys from a private fee-paying school (referred to as a 'public school' in Britain) and schoolboys from a state school (referred to as a 'comprehensive school' in Britain). Given the clear difference in status and the traditional rivalry between the two education systems, the schoolboys were expected to have well-defined and extensively shared representations of themselves and of each other. These representations were hypothesised to contribute to the establishment of a positive social identity for each group, via the process of intergroup social comparisons.

Twenty private school (PS) boys and 20 comprehensive school (CS) boys with an average age of 16 years were asked to write a 20-minute essay on the similarities and

differences between PS boys and CS boys. The forty essays were content-analysed by eight independent judges. The intergroup similarities and differences were coded by a word or phrase on a separate index card. Judges then placed all cards with similar phrases, words and meanings into the same pile and assigned a name to each category.

Interestingly, very few intergroup similarities were mentioned. The overwhelming number of contrasts made by the schoolboys noted differences between the respective groups. There was considerable agreement between the groups on the following differences: the better future prospects and superior social background of the PS boys; academic values, e.g., PS boys saw themselves and were seen by CS boys to be more hard-working and disciplined; and academic values, e.g., PS boys referred to streaming, small classes and the extensive choice of subjects which led to better academic standards, and CS boys also mentioned better structures in PS schools such as small classes and well-paid teachers.

Despite this agreement the respective schoolboys appeared to attach different evaluative connotations to these categories. Whereas the PS boys described themselves as 'hard-working', the CS boys were more likely to describe them as 'swots'. PS boys saw their school as providing a 'training for life', whereas CS boys saw public schools as an environment in which to meet 'string-pullers'. The authors argue that these evaluative elements may contribute to the establishment of a positive ingroup identity.

Each school group also mentioned their own unique differences between the groups which were not shared by the other. PS boys were more likely to refer to their own superior intellectual ability and to the discipline problems and anti- social behaviour of CS boys. They were also more likely to refer to the coeducational nature of comprehensive schools, which led to better relations between boys and girls, and to the different political and social attitudes of CS and PS boys. In contrast, CS boys were more likely to mention the 'snobbishness' of PS boys and their socially superior language. They also characterised PS boys as being polite, boring and hard-working. As the authors point out, it is interesting that the PS boys' essays contained both positive (e.g., intellectual ability) and negative characteristics (e.g., poor social relations with girls) of their own group, whereas the CS

boys did not define themselves in respect of their own positive features, but as a contrast to the negative characteristics they ascribed to the PS boys. This, of course, may reflect the differences in social status between the two groups, the PS boys' higher status allowing room for negative descriptions of their own group, which would not seriously endanger their overall positive social identity.

The authors conclude from the first part of their study that, although there were some categories shared by both groups, overall, the two groups of schoolboys possessed very different representations of themselves and of each other which were shared extensively within their own respective group. Such representations may be important in establishing positive ingroup identities by which groups define themselves and their relative place in society. Hewstone, Jaspars and Lalljee's research does not end with this unstructured descriptive study, but goes on to investigate whether these different group representations influence the causal attributions these schoolboys make in relation to academic success and failure. This part of the study will not be described here, since it forms the cornerstone of research on the relationship between causal attributions and social representations which will be detailed in Chapter 6.

Di Giacomo's (1980) research investigated the social representations of a protest movement held by students at the Catholic University of Louvain. The aim of the protest was to challenge the Belgian government's policy to increase annual enrolment fees at universities, along with proposed reductions in student grants and university budgets. He compared the students' representations with the stated aims and objectives of the local protest committee, in order to understand why the student population as a whole, despite its strong opposition to the government decisions, failed to ally itself with the local leaders of the protest movement.

As with Hewstone, Jaspars and Lalljee's (1982) study, Di Giacomo used an unstructured, descriptive method to investigate these representations. Nine target words were chosen which appeared central in the conflict, and a method of free association in response to these words was used as a way of eliciting representations about the committee, its political position and strategy, representations of the students themselves and

representations of power. Eight interviewers collected data from 281 students. Each subject was asked to free associate in response to one of the target words. In this way, adjectives evoked by each stimulus word were collated in the form of a dictionary. These initial responses were content analysed for similarity in meaning, thereby reducing the number of different words elicited for each target stimulus. The similarity in the number of common words was then calculated between all possible pairs of the target words. This produced a similarity matrix which was then analysed by Johnson's (1967) hierarchical clustering method and Kruskal's (1964) multidimensional scaling analysis.

The structure produced by the clustering analysis primarily differentiated between words associated with the political sphere (target words [TW], power, extreme right, extreme left) with the remaining target words, most of which referred to the student protest movement (TW; students, executives, Students' General Assembly [AGL], strike, committee, workers). Di Giacomo concludes from this that the students (TW; students), their protest (TW; strike) and the organisations formed to organise the protest (TW; committee; AGL) were not viewed within the traditional right-left ideological continuum, within which political issues are usually embedded. This was quite contrary to the position taken by the protest committee which represented the issue within the above political framework. The students' dictionaries also clearly separated themselves (TW; students) from 'workers', which was also contrary to the committee's position, which advocated for an alliance between students and workers for the protest.

The multidimensional scaling analysis yielded results which pointed further to different representational structures between the students and the protest committee. Most interesting was the second dimension which separated 'students' and the 'committee'. Within this dimension, students placed themselves closest to 'executives'. Di Giacomo argues that the students identify with this group more so than with the workers because they see themselves as future executives. While they may be powerless now, their upwardly mobile future ensures that they will move closer to power, having more in common with 'executives' and less in common with the 'workers'.

Overall, Di Giacomo concludes that, given the representational structures produced by the student dictionaries, it is not surprising that the students refused to ally themselves with the political goals and strategies of the protest committee. The students did not identify with the committee's construction of the issue in poltical terms, nor did they identify with the committee's call for student-worker solidarity. Basically, the committee failed to organise a popular student protest movement against the government's decisions, because the students did not represent themselves or the issue in the same way as the protest committee.

Social Representations in the Laboratory:

Social representations research has also been carried out in traditional laboratory settings The experimental studies of Abric (1984) have demonstrated neatly the way in which representations determine social action and behaviour. Abric's studies involve the use of the Prisoner's Dilemma Game, which has been a popular method in experimental psychology for the study of factors which influence human interaction in situations of competition and co-operation. Abric proposes that studies to date have only focused upon the objective conditions of the experimental situation, without investigating the way in which the player or subject construes or represents the situation itself - of the significance and meaning it holds for the subject.

In Abric's study, 40 subjects are given non-competitive instructions in the context of a Prisoner's Dilemma Game. Half are told their opponent is another student and the other half are told they are playing against a machine. However, in both cases, unknown to the subjects, the opponent is the experimenter who uses the same tit-for-tat strategy. After 50 trials, subjects are told that they are now playing against another opponent, again either a student or a machine. For two of the groups (experimental groups), the type of opponent changes (student to machine or machine to student). For the two control groups, the type of opponent remains the same (student to student or machine to machine). As with the first part of the experiment, in reality the opponent remains the experimenter, who continues to use the same strategy. Abric hypothesises that the image of the opponent as either human or machine, rather than the actual strategy adopted by the opponent, will determine what

strategy the player adopts. Knowledge of a human opponent is likely to encourage the use of a co-operative strategy by the subject, compared to the image of a machine component. Indeed, Abric found this to be the case.

Furthermore, the change of opponent from machine to human halfway through the game led to an increase in the level of co-operation adopted by the student, and a change halfway from student to machine led to a reduction in the level of co-operation. Thus, the 'representation' players had of their opponent led to the adoption of different strategies by the players: a reactive strategy for the human opponent and a defensive or non-reactive approach for the machine opponent.

Similarly, within the mainstream of the social perception literature, it has been found that manipulating a player's expectations (representations) of an opponent's dispositional nature and game playing strategies in competitive situations can lead to the adoption of game playing tactics by the player, which elicits behavioural confirmation of those expectations (Kelley & Stahelski, 1970; Snyder & Swann, 1978). Thus the labelling of an opponent as 'hostile' or 'competitive' leads to the adoption of hostile or competitive behavioural strategies by a player; strategies, which are, in turn, reciprocated by the opponent. Thus expectations and stereotypes (representations) about others "can and do exert powerful channeling effects on subsequent social interaction such that actual behavioural confirmation of these beliefs is produced" (Snyder & Swann, 1978, p. 157). Such experimental effects have significant implications for social interaction and communication processes in general, as various theorists and researchers have shown (Becker, 1963, Goffman, 1963, Rosenthal, 1974).

Codol's (1974, 1975,1984) studies in the social representations literature are also experimental in nature. Essentially, these studies were designed to delineate the process of anchoring to which Moscovici refers as one of the main processes by which representations are generated. Codol proposes that cognitive objects within any situation are represented in a highly complex and interdependent way. Unlike most research in the representations tradition, the major research objective was not to uncover the contents of these representations, but how cognitive contents are organised, structured and inter-related. As

such, this research shares some of the major objectives of more mainstream cognitive approaches in social psychology, details of which will be outlined in the following chapter.

Codol demonstrates in a number of small group studies how subjects in the group accommodate to change in the way in which one of the elements is represented (the task, the others, the group), by changing the representations of the remaining elements in the situation. Groups of three subjects were asked to perform a group decoding task which required either co-operative or competitive behaviour for its completion. The experimental manipulation consisted of the experimenter introducing the task as one which required collective/co-operative or individual/competitive efforts in relation to the task itself, of a specific group member or of the total group. A questionnaire was distributed after the specification of the rules of the task, but before the group began the task. The questionnaire investigated the representations subjects had of the degree of co-operation or competitiveness required in the task, amongst other group members, of themselves and of the group as a whole. During the course of the experiment, the experimenter manipulated the situation by either reinforcing or contradicting the initial instructions regarding the competitive or co-operative nature of the task. A post-experimental questionnaire, identical to the pre-experimental questionnaire, was administered after the experiment. Administering the questionnaire at different times aimed to discover whether representations of the elements in the situation had evolved or changed over the course of the experiment.

Codol investigated a number of issues resulting from the design of this experiment, only some of which will be outlined here. First, the pre-experimental questionnaire results indicated, as expected, that subjects before performing the experiment represent the elements in the task as much more interdependent and less differentiated. This was indicated by the degree of correlation between the judged elements; that is, they apprehend the task as a cognitive whole. However, through their involvement and experience with the task during the course of the experiment, they came to represent the constituent elements (the task, the others, themselves and the group) as much more independent and distinct.

Since the concept of the 'group' is likely to have a significant degree of semantic significance as it includes both 'others' and 'self' as objects of representation, it was

expected that experimental manipulations of the representation of the 'group' would have a greater effect on the way in which the whole situation was represented than would be the case if the representation of the task or a specific group member were varied. Indeed, it was found that when the representation of the 'group' was varied, intercorrelations between the other elements in the situation were highest.

It was also hypothesised that the representation of the 'self' would be a central or core representation around which other elements would be organised. Indeed, representations of the 'self' obtained the highest average correlations with the other constituent elements. Of next importance was the representation of the 'task' and, lastly, the representations of the 'group' and 'others' in the group. This suggests that the representation of the task was an important medium by which the subjects viewed the whole situation, particularly so since the completion of the task was the major goal of the experimental situation. It is not surprising that the representations of the group and of the other individuals in the group were least important, since little emphasis was placed on interpersonal relations for task performance. Subjects' representations, therefore, reflected what seemed functionally important to succeed in the prescribed situation. In this case, the task was more functionally important than relations within the group. If the other members of the group had been functionally important for the successful completion of the task, then it is likely that interpersonal relations within the group would have become a significant element in subjects' representations of the situation. Research in the social cognition literature has, indeed, found this to be the case in experimental situations where subjects anticipate interaction with another person in a problem-solving task (see Devine, Sedikides & Fuhrman, 1989).

Overview of Social Representations Research:

It is evident from the above small-scale, but representative, review of social representations research, that research in this tradition has varied both in content and method. There is no one integrative approach which characterises the research, other than the adoption of social representations theory as a guiding framework. Further, it is also

apparent that most of this research can be linked to research in more mainstream approaches in social psychology. More will be said about exploring the usefulness of such linkages in the following chapter but, thus far, it is evident that the issues and topics which have characterised social representations empirical efforts are ones that have been explored by more 'traditional' approaches. The unique feature of the social representations approach is its capacity to embrace a multitude of research topics under the 'rubric' of social representations theory. However, some critics see this 'conceptual flexibility' as an inherent theoretical weakness.

Farr (1990) has pointed out that social representations researchers have rarely given any reasons why they have chosen their topic of study, although many topics tend to be social issues which have attracted extensive media coverage. Farr suggests that public opinion polling may be used as a guide to choosing which social representations to investigate. Public opinion polling can provide an empirical base for discovering which issues, themes or concerns are the most salient in people's thoughts and communication, and thus worthy of study. This should extend beyond a simple distributive account of an issue which is characteristic of opinion poll research, to consider why and how a particular issue became important, the social origins of its emergence, how it has been communicated by people and the media and, in the course of transmission, how it has developed and changed.

Criticisms of Social Representations Theory and Research:

How Social is Social Representations Theory?:

In a recent paper reviewing social cognition research in twentieth century psychology, McGuire (1986) argues that there are at least six different meanings attached to the prefix 'social' in the social cognition literature. The least interesting meaning of social, according to McGuire, is that the research deals with phenomena in the social domain, such as person perception and interpersonal interactions. Secondly, 'social' can refer to cognitions that are shared by a collectivity or society, as in Durkheim's and Moscovici's usage of the term. Thirdly, it is used to refer to cognitions that originate in interpersonal interactions, as in the

symbolic interactionist approach. Furthermore, social can also refer to cognitions and representations that are able to be communicated verbally to others. The term social has also been used to differentiate between those attitudinal structures that serve to maintain and preserve the current sociocultural system from those attitudes that do not fulfill this function. Finally, 'social' has been used to refer to autonomous cognitive structures that exist independently from individuals, such as language.

It is easy to see that the theory of social representations subsumes all the above six meanings. The theory not only concerns itself with social phenomena, as distinct from natural phenomena, but it also construes the representations emanating from such phenomena as collectively shared, as originating and developing via interpersonal interactions and communication, and as being autonomous entities with a life of their own, once created. Although little has been said by Moscovici about the role of representations in maintaining the sociocultural system, it follows that representations that are shared by a collectivity, particularly by many members of a society, serve to protect and strengthen socio-cultural and political system support.

In an interesting paper entitled "Social psychology's (mis)use of sociology", Parker (1987) challenges whether indeed the theory of social representations is more 'social' than mainstream social psychological theories. He is critical of the tendency for social psychologists to use sociological theory as a means of overriding the problems of positivism and individualism which have plagued the discipline since its beginnings as an experimental science. Parker argues that the Durkheimian tradition, to which Moscovici refers as a forerunner to the theory of social representations, does not solve these dual problems; it simply gives the impression of doing so. It is well-recognised within the discipline of sociology, for example, that Durkheim's sociology is itself plagued by positivist and individualist elements. Moscovici uses the dualism which Durkheim establishes between collective and individual representations to argue that research into the latter is necessary and complementary to an understanding of the social and symbolic nature of collective representations. By arguing that social representations are not only symbolic but also cognitive, Parker argues that Moscovici individualises the concept. Social

representations are thereby defined as cognitive structures residing in the mind of each individual, making subjective meaning more important than the socially shared and symbolic nature of these contents. Far from breaking with traditional approaches in social psychology, Parker argues that the theory of social representations can very easily be accommodated and absorbed by the mainstream.

Harré (1984) expresses similar concerns, arguing that the theory implies a distributive model of representations. Rather than viewing representations as cultural products arising from collective activities, they are seen as cognitive contents which are present 'in the heads' of every individual in a defined collectivity. According to critics like Harré and Parker, the cognitivist focus on the internal contents of the mind has the net effect of individualising the concept of representation and stripping it of its social and collective character. Moscovici's defence (1984) to these criticisms is that it is just as legitimate to study the way in which concepts and images become a part of individual consciousness as it is to study collective phenomena such as the literature and publications of a particular group. The study of social representations should include both kinds of phenomena as, indeed, it has. Clearly, while some social representations may be independent of individual cognition, many representations which circulate within a culture or group are undeniably apprehended at the individual level. As Hewstone, Jaspars and Lalljee (1982) argue, ". . .these shared systems of belief constitute 'bridges' between individual and social reality, and makes the study of such representations social psychological rather than sociological" (pp 242-243). Cognitively-oriented sociologists (Morgan & Schwalbe, 1990) and anthropologists (Sperber, 1984; 1990) have also advocated the study of the cognitive contents of people's minds, believing that this content reflects the collective knowledge and consciousness of the social groups to which people belong.

The Meta-theory:

Wells' (1987) distinction between the meta-theory and the phenomenal theory will be used in detailing and evaluating the criticisms directed at social representations theory. It is

important to make this distinction because one can agree with one and not necessarily embrace the other. Wells' criticisms are largely directed at the meta-theory.

Moscovici makes a fundamental distinction between the physical and social worlds, the nature of reality differing between the two. Within the latter, all ideas, views and theories about human experience and behaviour are socially and culturally constructed. Wells argues that Moscovici's social constructivist argument makes it difficult to establish and evaluate the status of any theory, including his own. "The difficulty with Moscovici's pre-suppositions and supporting arguments is that they lead to a theory which has no escape from relativism and is therefore weak in critical power with respect to competing theories" (p. 436).

According to Wells this paradoxical position is a result of Moscovici's assertions about the nature of reality in the consensual universe. The primacy of the physical world in determining human reality is denied by Moscovici. Wells argues that, while reality is undoubtedly socially and culturally mediated, it is nevertheless shaped by the demands and constraints of the physical world. Wells challenges Moscovici's distinction between the social and physical worlds as separate realities, and prefers to conceptualise them as "two different aspects of the same fundamental reality" (p. 438).

McKinlay and Potter (1987) direct similar criticisms at Moscovici's writings. While social representations determine reality, Moscovici asserts that representations can be veridical or illusory, correct or incorrect. Yet there is nowhere in the theory whereby the 'correctness' of a representation can be assessed. Scientific knowledge cannot be used as a yardstick for measuring 'correctness', for it implies a form of reductionism which Moscovici would reject. Thus, ". . . there is no representation-free way of identifying which representations are veridical and which are not" (McKinlay & Potter, 1987, p. 184).

Like Wells, McKinlay and Potter also express doubts about the fundamental distinction Moscovici makes between scientific and consensual knowledge: a distinction which does not depart from the orthodox view in the sociology of scientific knowledge. Indeed, the status of scientific knowledge has always been given this special reverence (Mulkay, 1979). While Moscovici maintains that the former world is a world of facts and objective

scientific endeavours, independent of representations, at the same time he argues that everyone is subject to the influence of social representations. This implies that scientists, too, must rely on social representations to construct reality and imbue their activities with meaning. They, therefore, are also subject to the influence of social representations which they must inevitably draw upon when engaged in scientific work. Scientific knowledge is not immune from social representations, as is claimed by Moscovici. Recent work in the sociology of scientific knowledge argues this precise point (Gilbert & Mulkay, 1984; Latour, 1991; Mulkay, 1979).

Overall, the present author shares some of these critical concerns with Moscovici's writings about the nature of reality and the fundamental difference between the everyday world and the world of science. Since the main aim of this thesis is to explore aspects of the phenomenal theory, it is important that the criticisms directed at this level should be dealt with in more detail.

The Phenomenal Theory:

Central to the concept of social representations is the group-defining nature of representations. Indeed, empirical studies in the area have looked at the representations held by different social groups. Potter & Litton (1985) express concern at the way in which groups are defined and delineated by researchers in this tradition. Naturally occurring groups are usually chosen as units of analysis in the empirical studies thus far, without solving the problem of whether the 'group', as defined by the researchers, has any psychological salience to the individuals who are said to occupy them. Potter and Litton argue that the definition of a group is problematic, given that the constitution of a group is itself determined by members' representations of the 'group'. Thus,

> ". . . group categories can themselves be understood as social representations constructed by participants to make sense of their social worlds. The potential inconsistency arises because the object which is the topic for analysis is also an analytic resource (Potter & Litton, 1985, p. 83).

Group membership should therefore not be taken as a given when reaching conclusions in social representations research, but should itself be the target of such

research. It is therefore important that participants actually identify with the social categories they are assigned. Harré (1984) expresses a similar concern in his reflections on the theory. The definitional tension between 'objective' and 'subjective' categories has yet to be resolved and, indeed, has plagued sociological research for many years (Chamberlain, 1983).

Another notable concern is the ambiguity surrounding the notion of consensus which is supposed to characterise a social representation (Potter & Litton, 1985; Litton & Potter, 1985). One of the central and, indeed, defining features of a representation, is its shared or consensual nature which contributes to the establishment of a group's identity (Moscovici & Hewstone, 1983). Potter and Litton (1985) and Potter and Wetherall (1988) argue that the theory of social representations implies a well-defined notion of consensus but, in reality, says little about the degree or level of consensus necessary before a representation can be said to be shared by a group. This is of particular importance, since individual variation will always exist within a group's 'shared' perspective. These critics argue that in empirical studies to date (e.g; Di Giacomo, 1980; Herzlich, 1973; Hewstone, Jaspars & Lalljee, 1982) there is often a presupposition of consensus and the use of analyses which ignore diversity. They have criticised Hewstone, Jaspars and Lalljee's (1982) study and Di Giacomo's (1980) research for employing analyses which utilise aggregate or mean scores which have the net effect of homogenising possible intra group differences or variations.

> ". . . in the empirical studies undertaken so far consensus tends to be presupposed and internal diversity disguised by the use of certain analytic procedures. Distinct social groups and populations are assumed to have specific, shared, social representations. This leads to an emphasis on similarity at the expense of variation and difference"
> (Potter & Litton, 1985, p.84).

Similar reservations are directed at Herzlich's (1973) work on the representations of health and illness in French society. As argued earlier, it is difficult to discern, independently from the interview data she presents, the degree of consensus evident in her respondents' accounts.

Potter and Litton (1985) argue that it is essential to differentiate between different levels of consensus and that, in their discourse studies at least, levels of consensus differ

with different contexts of language use (Litton & Potter, 1985). In their analysis of the range of explanations or social representations yielded by the media and respondents to the St Pauls street riot of 1980, these authors demonstrate that, while at a general level there was considerable consensus as to the available range of explanations to account for the riot, at more specific explanatory levels there was considerable variation as to whether people fully or partially accepted or rejected these available accounts as having any legitimate explanatory power.

Litton and Potter distinguish between the 'use' and 'mention' of an explanation. The former refers to an explanation that is actually utilised to make sense of an event, whereas 'mention' refers to a representation or explanation that is not actively used but is referred to as an available explanation. The authors found that, whilst many subjects revealed their preferred explanations for the street disturbances, they also 'mentioned' other available or competing explanations whose relevance they rejected. Furthermore, they make a distinction betwen the 'use' of an explanation in theory or in practice. Far from creating a consensual universe, the authors present their empirical study as evidence for the existence of conflicting and contradictory social representations.

While there is some validity regarding the essential point that the existence of consensus has not been demonstrated sufficiently in empirical studies of social representations thus far, Potter and Litton's contrary analysis remains problematic. Explanations for a highly controversial and dramatic event, such as a riot, by definition will inevitably yield a range of conflicting explanations. A riot's very political nature and deviational salience guarantees such a response. Presumably, a riot or conflict will elicit a variety of representations, as the explicit conflict may be based upon the implicit existence of competing social representations.When Moscovici argues that there is a consensual universe, it is unlikely that he has in mind highly controversial and political issues which form an arena for considerable debate and conflict within and between social groups in any society. Furthermore, nor does he deny that diversity exists within a consensual framework. "We can be sure that this consensus does not reduce to uniformity; nor, on the other hand, does it preclude diversity . . . There is a consensual universe, but there is not a

precise consensus on every element at each level" (Moscovici, 1985, p. 92). It is diversity at different levels that gives a representation its dynamic nature and leads to its continual renegotiation in social interaction and communication.

In presenting the diversity which existed in the practical use of explanations to account for the riot, Litton & Potter also avoid the obvious problem of 'who' was making the statements. Moscovici's theory would predict overall group differences in responses, depending on respondents' respective social identifications and affiliations. While Litton & Potter raise this possibility, they do not deal adequately with this issue but prefer to treat it as a further problematic, given the difficulties in objectively defining the constitution of a social group without reference to respondents' subjective categorisations or social representations of group entities.

To conclude their critical evaluation of Moscovici's concept, Potter and Litton suggest that the study of social representations might prove to be more fruitful by studying 'linguistic repetoires'. It is argued that a study of discourse will reveal the types of grammatical and stylistic constructions and metaphors (linguistic repetoires) people draw on in different contexts. These changes in language style in different functional contexts, in effect, reveal the individual's social representations. Neither Moscovici (1985), Semin (1985), nor Hewstone (1985) agree with this reconceptualisation of social representations as linguistic repetoires. Although language should form an essential component of the study of social representations, research should not be limited to aspects of language. Images and preverbalised concepts are also central to the study of social representations. De Rosa's (1987) research on pictorial representations of madness well-illustrates this latter point.

While there may be practical problems in measuring consensus, what is important is that the theory of social representations attempts to redress the balance of research by moving away from an excessive concern for individual differences in cognition to an interest in cognitive structures that are shared by many. Researchers in the American tradition of social psychology, concerned with the study of individual belief systems, have constantly attempted to show the diversity of opinions in collectivities of individuals and ignore, or at least downplay, the similarities (Nisbett & Ross, 1980). At the very least,

measurement problems should not dictate or determine the epistemological status of conceptual issues such as shared social beliefs. Indeed, chapters 3 and 4 of this thesis deal with the extent to which knowledge structures are shared and how such consensus might be measured.

Conclusion:

While there are many problems which plague the precision with which social representations theory (in particular, the meta-theory) has been presented, and with the extent to which there are empirical demonstrations of the utility of the concept, there is a sufficient amount of theory and data at present to suggest that the study of social representations may contribute to an understanding of shared social knowledge. Whilst social representations theory and research have been branded as distinctly ' European' (Jaspars, 1986; McGuire, 1986), they do have more than just passing similarities to areas of mainstream research in social psychology. Some of these areas were outlined earlier when presenting examples of social representations research. Conceptual connections can also be made between Moscovici's theory and the currently dominant area of social cognition. The following chapter explores the links between social representations theory and social schema theory, itself a theory based on the concept of internalised social knowledge.

Footnotes:

1. Of course, as Doise (1986) emphasises there were notable exceptions to this methodological individualism such as the work of Lewin and Sherif.

2. Not all social psychological approaches to the study of values, belief systems and ideologies have been individualistic in nature. Most notable of the exceptions is the research by Billig & Cochrane (1979) on the value systems of political extremists, and Billig's (1982) treatise on ideology and social psychology.

Chapter 2

Towards an Integration of Social Representations Theory and Social Schema Theory.[1]

Introduction.

Jahoda's observation that social representations theory is closely allied to existing social-psychological concepts such as norms, ideology and belief system, has also been made for the concept's affinity with concepts which have contemporary currency in the study of social cognition. While the relationship between the theory of social representations and research in mainstream social cognition has often been alluded to, detailing the nature of this relationship and its implications for social psychological research is somewhat — problematic. Indeed, Moscovici's theory has gained momentum outside the European continent with the increasing realisation that social representations can add a wider social dimension to social cognition approaches. Jaspars & Fraser (1984) have demonstrated this for research on attitudes. Chapters 5 and 6 of this thesis will explore the contribution social representations theory can make to attribution theory (Hewstone, 1989a; Moscovici, 1981; 1984a; Moscovici & Hewstone, 1983) and the sociology of knowledge. The present chapter is a preliminary attempt towards forging links between Moscovici's concept and that of mainstream social schema models.

There are points of convergence or parallels between the theory of social representations and social schema theory. Like social representations, social schemata have also been construed as internalised social knowledge. Essentially, both theories are knowledge structure approaches to social cognition. Schemata and representations are both conceptualised as existing knowledge structures which guide and facilitate the processing of social information, and both are conceptualised as memory traces with an internal organisational structure (Fiske & Taylor, 1984; Moscovici, 1981; 1984a; Taylor & Crocker, 1981). Schema research and social representations also emphasise the use of cognitive short-cuts, or heuristics, in the processing of social information (Moscovici, 1981; 1984a; Nisbett & Ross, 1980). Furthermore, both schemata and representations are conceptualised as affective structures with inherent normative and evaluative dimensions (Fiske, 1982; Moscovici, 1981; 1984a).

While the processing functions of social representations can be incorporated into the information processing models of mainstream schema models, there are important

divergences between the two theories (Semin, 1985). Schema theory is essentially an information processing model predominantly studied within an individualistic perspective; the theory of social representations purports to be much more than this. It is a theory which attempts to understand individual social psychological functioning by making links with societal and collective processes (Forgas, 1983). The two theories are therefore articulated at different levels of explanation (Doise, 1986).

There is reason to believe that social schema theory may benefit from a social representations perspective. The latter can provide a social (societal) context that is missing from most schema approaches. To date, Moscovici's theory has attracted little recognition within North American mainstream social psychology (Zajonc, 1989) [2]. Moscovici, on the other hand, has, at times, acknowledged the relevance of social cognition research, and has borrowed from its findings but, on most occasions, has dismissed the work as inadequate because of its asocial and decontextualised nature. In 'The Coming Era of Representations' (1982) Moscovici has little confidence of a rapprochement between the North American and European traditions but, more recently, (Moscovici, 1988) he acknowledges that there are points of convergence between the two approaches.

Given the psychological processes inherent in the concept, Jahoda (1988) has suggested that social representations research be incorporated within mainstream work on social cognition. As discussed in the previous chapter, Parker (1987) has predicted pessimistically that the theory of social representations, far from breaking with mainstream work, will inevitably become absorbed by it because of the concept's inherent notions of individual cognition, action and representation; that is, the concept is plagued with an inherent Weberian individualism.

As will be argued in this chapter, and as has been argued by Moscovici (1988), though there are similarities between social representations and social cognition research, they remain at present distinct and different approaches. Social cognition research in general, and schema theory in particular, fails to take into account the social interactive and cultural context within which human cognition takes place. Schema theory has been characterised by a focus on delineating the processing functions of schemata without due consideration to

context or content. For Moscovici, the information processing functions central to schema theory are viewed as being determined by content itself. Social representations act as reference points for the selection, categorisation and organisation of social information (Semin, 1989). Lamenting the direction which social cogntion research had taken, Forgas in 1983 argued,

> "Social psychology is not primarily the study of how isolated, individual information processors manage to make sense of the social stimuli presented to them. Far more, it is a field devoted to understanding motivated, normative social behaviour. It is remarkable that even though much of the critical impetus for a reformed social psychology over the past decade came from an intellectual tradition which objected to the extreme individualism of the discipline . . . the recent social cognition paradigm turned out to be even more individualistic than its predecessors. Its models and theories come nearly exclusively from cognitive psychology: a single individual gazing into a tachistoscope, reading scenarios or pressing buttons in a reaction-time experiment is the most typical target for research" (pp 130-131).

Schema theory views social knowledge as a 'fixed given' with little reference to the way individuals construct social reality through social interaction and communication. Indeed, this deficit has been recognised by researchers within the mainstream. Zajonc has argued repeatedly that the study of cognition should take place within its natural context of interaction and communication (Zajonc, 1960; Zajonc & Adelman, 1987). Most cognitions emerge and develop from communication with others. Communication is the process by which cognitive contents are received and transmitted from one person to another. Zajonc (1989) states,

> "Yet it is a strange paradox that cognition is studied in isolation of a very essential social process that is its immediate antecedent and consequence - communication . . . Cognition is the currency of communication. The constraints on communication and the transmission of mental content between minds, the transformations of these contents, and the resulting change in the participants, are rarely studied in the mainstream social psychology. Yet soon we will need to know about these processes if we are to understand even the contents of individual minds. For they are under serious collective influences" (p. 357).

Furthermore, in order to communicate, individuals must anticipate the sharedness of cognitive contents and their structure. Some degree of consensual knowledge must be assumed between participants for social interaction and communication to take place (see Guerin & Innes, 1989; Morgan & Schwalbe, 1990; Sedikides, 1990).

There has also been little work on specifying the <u>content</u> of various schema domains, the underlying assumption being that the processing functions of schemata are universal, not only to individuals and groups but also across content domains. Although there has been some theoretical and empirical work recognising that the content of a knowledge structure, representation or schema may have some bearing on the way it is processed, generally, this has been limited to <u>individual factors</u> influencing schema acquisition and processing, such as the degree of personal relevance the schema has to the individual (Higgins, Kuiper & Olson, 1981) or individual differences in expertise with the knowledge structure (Fiske, Kinder & Larter, 1983).

The shortcomings of schema theory will be demonstrated throughout this chapter by emphasising the added social and contextual perspective social representations theory can provide. So long as schema theory remains at the individual level of analysis, it can never explain adequately the totality of social cognitive processes. It will also be argued, however, that the theory of social representations needs a clearer cognitivist perspective in order to understand how social representations are acquired, processed, developed, structured and used by individuals in the course of everyday social interaction. Codol (1984) has stated,

"As far as the mechanisms and the processes whereby representations are elaborated and communicted are concerned, they can only be understood in a dual and doubtless highly complex way which involves, on the one hand, both intergroup and interpersonal relationships and, on the other hand, the more specific cognitive mechanisms whereby individuals first perceive and then reinspect reality." (p. 241)

The aim of this chapter is not to fulfil Parker's prophecy and reduce the concept of social representations to a purely cognitive, individual phenomenon. The present chapter is a preliminary effort to forge links between what are both knowledge structure approaches to social cognition, the one collective, the other individual, by demonstrating how both can mutually benefit from recognition of each other. Doise (1986) has demonstrated how unification of different analyses may lead to better future research. It is believed that an attempt at articulation between these different levels of explanation may lead to a more thorough understanding of social, cognitive processes (Doise, 1986; Van Dijk, 1988). While this chapter advocates links between these different social psychological approaches,

it is interesting to note that Morgan & Schwalbe (1990) have put forward similar arguments for an interdisciplinary merger between these two social psychological traditions and certain sociological theories.

Social Schemata.

The schema concept has had a recent rebirth through its application to the understanding of the nature and function of social cognition. Schema theory is essentially an information processing model of perception and cognition. A schema is conceptualised as a mental structure or knowledge structure used to select and process incoming information from the social environment. In Taylor & Crockers' (1981) words, a

> " . . . schema is a cognitive structure that consists in part of a representation of some defined stimulus domain. The schema contains general knowledge about that domain, including specification of the relationships among its attributes, as well as specific examples or instances of the stimulus domain . . . The schema provides hypotheses about incoming stimuli, which include plans for interpreting and gathering schema - related information" (p.91).

Schemata take the form of general expectations, and thus allow for the prediction and control of the social world by guiding the individual's perceptual, memory and inference processes. Schema research aims to understand how people represent social information in memory and how new information is assimilated with existing knowledge; that is, how people are able to process, interpret and understand complex social information.

While most schema theorists cite Bartlett's work on remembering (1932) as the intellectual tradition upon which schema models are based, Edwards & Middleton (1986) emphasise the misleading way in which Bartlett's concept has been borrowed and applied in contemporary cognitive theory. Bartlett emphasised the affective, cultural and contextual nature and functions of schemata.

> "For Bartlett, schemata were not static knowledge structures stored in the brains or minds of individuals for the interpretation of experience, but rather, functional properties of adaptation between persons and their physical and social environments. Their essential properties therefore were social, affective and purposive, the basis of actions and reactions in the contexts of living one's life" (p. 80).

Indeed, Bartlett's concept of schema has more in common with the concept of social representation than with the present day cognitivist version of schema (Semin, 1989).

There have been extensive empirical applications of the schema concept. Research has been applied to four main content areas: person schemata, self-schemata, role schemata and event schemata (Fiske & Taylor, 1984; Taylor & Crocker, 1981), although not exhaustive of the types of knowledge structures with which schema research concerns itself (see e.g., Conover & Feldman, 1984). Person schemata research has dealt with abstracted conceptual structures of personality traits or person prototypes (Cantor & Mischel, 1977), that enable a person to categorise and make inferences from the experience of interactions with other people. A schema which has received much attention empirically, at least since the mid-1970s, is the self-schema (Higgins & Bargh, 1987; Markus, 1977; Markus & Wurf, 1987). Self-schemata research examines the conceptual structures people have of themselves, and looks at the degree to which such structures may affect the speed and efficiency of processing information which is relevant or irrelevant to the self. Individuals are said to be 'schematic' on a particular dimension (e.g., independence) if they regard the dimension as central to their self concept and 'aschematic' if they do not regard the dimension as central to their self concept (Markus, 1977). Role schemata refer to the knowledge structures people have of the norms and expected behaviours of specific role positions in society. Event schemata have been conceptualised as cognitive scripts that describe the sequential organisation of events in everyday activities (Schank & Abelson, 1977). Thus, event schemata provide the basis for anticipating the future, setting goals and making plans. They enable the individual to set strategies to achieve such goals, by specifying the temporal events or appropriate behavioural sequences through which the individual must move to attain the desired state.

Social psychologists have been quick to utilise the schema concept in social knowledge domains, because of its potential to handle the complexity that such information entails (Fiske & Linville, 1980). Whether, indeed, the concept has fulfilled this potential, is problematic. While critics have been quick to criticise Moscovici for his refusal to lay down a prescriptive definition and methodology for the study of social representations, he argues

that his concept is no more ill-defined and problematic than most other concepts in the social cognition mainstream (Moscovici, 1988). The ecological validity of the schema concept has been seriously questioned (Baron & Boudreau, 1987), and the concept of causal schema has been criticised for its circularity and potential to explain almost anything (Fiedler, 1982).

We may now consider, in turn, a number of points on which social schemata and social representations may be compared and contrasted, and show where the two concepts may be able to benefit from an analysis of the other.

Comparison of Representations and Schemata:

Schemata and representations as theory-driven structures.

Schemata have been construed as lending organisation to experience. A schema is matched against an incoming stimulus configuration, and the relationship between the elements of the schema are imposed on the incoming information. A schema guides identification of the elements of the incoming stimulus, thereby providing a context for its meaning, organisation and internal representation. Information processing can therefore be conceptualised as theory driven rather than data driven; that is, it relies on people's prior expectations, preconceptions and knowledge about the social world in order to make sense of new situations and encounters.

So, too, social representations have been conceptualised as 'theories' which individuals have about the nature of events, objects and situations within their social world. Both concepts are concerned with the way in which existing knowledge structures are used to familiarise and contextualise social stimuli.

In social representations theory, anchoring is the process by which the novel or strange is rendered familiar, by comparisons to ordinary categories and classifications. As Billig (1988) points out, the process of anchoring bears strong similarities to information processing mechanisms associated with schema models. The comparison and categorisation of unfamiliar or novel social stimuli to similar categories is therefore an essential processing function of both schemata and representations. As with schemata, representations allow "something unfamiliar and troubling, which incites our curiosity to be incorporated into our

own network of categories and allows us to compare it with what we consider a typical member of this category" (Moscovici, 1981, p. 193, *emphasis added*). What is more, both theories regard the mechanisms of comparison, categorisation and classification as universal processes; as inherent and central features of human cognition (Billig, 1988).

Both schema models and social representations emphasise the biased judgements that are made via the use of these mechanisms. As existing cognitive structures, schemata can 'fill in' data that are missing from an incoming social stimulus. Schemata can either direct a search for the relevant information to complete the stimulus more fully, or they can fill in the missing values with default options or best guesses which are based on previous experiences with the particular stimulus. Schemata can also provide short cuts for solving problems by using various heuristics such as availability (Tversky & Kahneman, 1973) and representativeness (Kahneman & Tversky, 1972; 1973). For example, with limited information people use the representativeness heuristic to determine to what degree a specific stimulus is representative of a more general category. Is Joe, who is mild mannered and quiet, more likely to be a librarian or a boxer? In schema models, people are viewed as 'cognitive misers' who simplify reality "by interpreting specific instances in light of the general case" (Fiske & Taylor, 1984, p. 141). Similarly for Moscovici, the prototype, which is the basis upon which classifications are made, "fosters ready-made opinions and usually leads to over-hasty decisions" (1984a, p. 32).

Despite these similarities, there are important differences between the two approaches. First, as Billig (1988) has indicated, schema models have treated the processes of classification and categorisation as elements of individual cognitive functioning. Social representations theory, on the other hand, regards anchoring as a social process. Where do the categories of comparison come from, if not from the social and cultural life of the individual, whose own experience is embedded in the traditions of a collectivity? Schema models have little to say about where these categories come from. They are simply seen as cognitive structures originating and existing inside individuals' heads, not as structures which may reflect an historical and cultural reality. Thus " . . . naming is not a purely

intellectual operation aiming at a clarity or logical coherence. It is an operation related to a social attitude (Moscovici, 1984a, p. 35).

The process of anchoring, as defined by Moscovici, implies something stronger than merely contextualising social stimuli in a familiar categorical context. Moscovici seems to imply that objects and ideas are epistemologically located by the process of anchoring. Anchoring actually defines the nature of the stimulus by the process of allocating names and labels.

Secondly, schema theory presupposes a rational view of people as information processers. The errors or biased judgements so typically found in social cognition research are argued to be a result of people applying incorrect laws of judgement or making hasty decisions in the face of little data. Moscovici (1982) has argued that errors or bias are not purely a matter of bad information processing but reflect underlying preconceptions or social representations which lead to these distortions. For example, the so called 'fundamental attribution error' (Ross, 1977), the tendency to attribute causality to the disposition of the person rather than to situational factors, may not simply be an error of judgement. Its pervasiveness suggests that it is motivated by a strong individualist ideological tradition in western societies, or social representation which views the person as being the centre of all cognition, action and process (Lukes, 1973). Thus, Moscovici does not view these errors in simple rationalist cognitivist terms, but as grounded in dominant preconceptions shared by collectivities.

While both theories conceptualise social cognition as predominantly theory-driven, the view of the organism as 'theory' rather than 'data' driven has begun increasingly to be challenged (e.g. Higgins & Bargh, 1987). Subjects are influenced by the nature of the stimulus information (e.g., Hastie & Kumar, 1979) and there is clear evidence that the effect of schemata is not autochthonous; schemata that are activated are related to the data that activated them and the data to which they are applied. There is an obvious interaction between schema and data.

What may be important, however, is the degree to which a schema, or construct, may be activated by environmental data. Once a schema has been activated, then it may act as a

'top-down' determinant (Higgins, King & Mavin, 1982). Social representations, if they are pervasive, collective and akin to 'common sense' may, therefore, be, first, particularly easily activated by data and, secondly, such activation may be more automatic and uncontrolled and, hence, have an effect upon judgement of which the person is essentially unaware. More will be said later about this uncontrolled socialised processing.

Resolving this apparent contradiction between a 'depth-of-processing' (data-driven) and a schematic (theory-driven) model of information processing, Forgas (1985) found both models to be ecologically valid. He found different processing strategies being adopted, depending on the nature of the stimulus information. The more culturally salient and consensual the stimulus, the more likely was schematic processing to be activated, whereas information with low cultural salience is novel and distinctive and, therefore, more likely to be data-driven. It follows that social representations, as culturally salient and consensual phenomena, are more likely to be theory-driven.

The tension between theory vs data-driven processing sits easily with Billig's (1988) proposal to look for countervailing cognitive mechanisms in human thought. In particular, the process of anchoring information should be juxtaposed with that of particularising information, where data are treated as different and set apart because they fail to fit familiar categories of use. Billig emphasises that, while particularisation is not ignored by Moscovici (1982), he views it as a process which results from the initial anchoring or categorisation of information, not as a process contradictory to anchoring. This is an interesting idea, for it leaves open the possibility of change in representations and may provide the mechanism by which to research the dynamic and changing nature of representations about which Moscovici speaks. To what extent are schematic structures/representations challenged by the introduction of information which does not fit easily with the usual categories of comparison and classification? The issue of change in representations will be discussed more fully later.

Schemata and representations as memory traces.

Schemata influence and guide what social information will be encoded and retrieved from memory. Research has generally found that structure facilitates the recall of

information, so that a good stimulus match to a schema will facilitate overall recall and that schema-congruent material will be better recalled than schema-incongruent material. Furthermore, schemata influence processing time, with the research literature predominantly indicating faster processing times for schema-relevant as opposed to schema-irrelevant information (e.g., Rothbart, Evans & Fulero, 1979). However, there is some research contradicting this general rule: that is, inconsistent information or schema-incongruent material, because it is novel and distinctive, may be better recalled than consistent information (e.g., Hastie & Kumar, 1979). Again, this highlights that some information is data-driven or particularised.

Certainly, social representations have been conceptualised as memory traces which facilitate the structuring and recall of complex social information (Moscovici, 1981; 1984a). However, no experimental research has been carried out in the representations literature on the recall and processing time of material related to representational structures. Indeed, Moscovici would probably eschew such efforts. While the present author shares some of Moscovici's reservations about the usefulness of such mainstream information processing approaches, research of this nature may ultimately prove to be very valuable. Experiments on the recognition and processing time of representations may be a useful way to identify the pervasiveness of certain representations. Images, values, ideas, categories that are easily recognised and quickly responded to by many people within a group may be a defining characteristic of a social representation. As argued earlier, social representations are more likely to be characterised by a certain degree of uncontrolled or automatic processing which would suggest faster processing time and recognition. Within the schema literature, well-learned and consensual structures, such as highly organised and stereotyped event schemata or scripts (Schank & Abelson, 1977), usually do not evoke exhaustive cognitive processing because people come to expect the sequence of events that follows or, in Hastie's term, may not occur in "on-line" social judgement (Hastie & Park, 1986). People's prior expectations and knowledge structures will determine what incoming social information they will need to engage in greater cognitive activity. Schema or representation-consistent information will not require in-depth processing, given that the information is expected and, therefore,

automatically processed. However, schema or representation-inconsistent information may be dependent upon memory-based cognitive processing (Devine & Ostrom, 1988; Hastie & Park, 1986).

Indeed, it would not require much to reconceptualise cognitive scripts or event schemata as social representations in Moscovici's sense. Many of the cognitive scripts used in experimental settings are highly consensual in nature, such as the oft-quoted restaurant script. Event schemata are reliable knowledge structures from which to set goals and anticipate the future, precisely because they are consensually based and socially prescriptive. The same could be said for social stereotypes. Recent research on the activation of stereotypes, within the social schema tradition, suggests a possible rapprochement with social representations theory. Dovidio, Evans & Tyler (1986) have shown that American whites may have easily primed negative schemata about American blacks. The actual content of these stereotypes seems to be widely shared, consensual in form, and may even be automatically activated. Devine (1989) has shown that even non-prejudiced whites know and recognise, and therefore sharewith highly prejudiced people, the negative cultural stereotype of blacks. Furthermore, both prejudiced and non-prejudiced people show the same speed of activation of the stereotype by primes presented outside awareness. While this research has been concerned with negatively sanctioned stereotypes, it remains to be seen whether positive consensual structures may be similarly activated.

Schemata and representations as evaluative and affective structures.

Moscovici is not alone in criticising schema theory's over-emphasis on cognitive factors at the expense of motivational or affective influences on processing. Schema theorists themselves have recognised this deficiency (Higgins, Kuiper & Olson, 1981). As a result, schema theory is attempting to redress this balance. Conceptually, at least, schemata represent normative structures and thus provide a basis for evaluating one's experience. Importantly, this normative function can also serve to evaluate affectively an incoming configuration. Fiske's work (1982) on schema-triggered affect is illustrative here. Fiske argues that some schemata are characterised by a considerable affective component so

that, when an instance is matched against an affect-laden schema, the appropriate affect is cued. Similarly, the process of classifying and naming (anchoring) in social representations theory is conceptualised as not only a cognitive process but also an evaluative one. Social categories for Moscovici are inherently value-laden.

> "Neutrality is forbidden by the very logic of the system where each object and being must have a positive or negative value and assume a given place in a clearly graded hierarchy. When we classify a person among the neurotics, the Jews or the poor, we are obviously not simply stating a fact but assessing and labelling him, and in so doing, we reveal our 'theory' of society and of human nature" (Moscovici, 1984a, p. 30).

The unity of evaluation and cognition, as presented by Moscovici in the quote above, is, however, being challenged by recent research in the schema literature. Devine's (1989) recent research separates the cognitive component of stereotypes from its evaluative, prejudicial component. Devine argues that, while most people know and recognise the cognitive content of stereotypes of social groups within their culture, this knowledge should not be equated with prejudice towards particular groups. Prejudice towards a group is determined by the degree to which a person accepts or endorses the stereotype. According to Devine, because the cognitive content or representation of a stereotype is widely known by most people within a society, it is probably activated automatically in social cognitive processes, particularly those requiring elements of social categorisation. Low prejudiced people, however, inhibit and control the activation of the stereotype, whereas high prejudiced people do not need to control or inhibit the stereotype since it is consistent with their personal beliefs about members of the stereotyped group. Thus stereotypes and personal beliefs should be conceptualised as distinct components within people's knowledge structures of particular social groups. As such, there may be varying levels of consensual representations. For example, at the collective level, the content of stereotypes about men and women may be extensively shared and thus hegemenous within a society but, at the intergroup and individual levels, these stereotypes are evaluated and accepted differentially by different groups and individuals in the society.

While an evaluative attitude may be based upon beliefs with little associated affect, many important attitudes are primarily determined by the affective reaction elicited by an

object, and this may make an independent contribution to evaluation (cf. Abelson, Kinder, Peters & Fiske, 1982; Innes & Ahrens, 1989). An important issue is the degree to which affective reactions may be acquired and may be communicated to others so as to be shared reactions and not only idiosyncratic responses to social events. Nationalism and collectivist racism are cases in point.

There is no doubt that more work needs to be done to understand the complex relationship between cognition, evaluation and affect in knowledge structure approaches, or what Moscovici refers to as the symbolic functions of social representations.

Internal organisation of schemata and representations.

Schemata are theorised to be hierarchically structured with more abstract categories of information at the top of the pyramidal structure and more specific categories at the bottom. This enables the person to move from the concrete instance to a more general level of inference. Thus information can be processed at different levels of abstraction as one moves vertically and laterally through the schema structure. In addition, different schemata can be linked to one another in a hierarchical manner where higher order schemata can subsume more concrete, lower-order schemata. The organisational elements of a schema reveal the way in which an individual organises information about particular social domains. For example, experimental settings have found that a balanced structure is a preferred mode of schema organisation for sentiment relations, whereas schemata in which dominance relations prevail are primarily characterised by a linear mode of organisation. Similarly, social event schemata appear to have a causative structure, while action schemata are characterised by a hierarchical and temporal organisation (Taylor & Crocker, 1981). Here is one area of schema research which explicilty recognises that the actual content of the schema will determine the way it is processed - the recognition that content has a direct bearing on the way information is organised and structured (cf. Reeder & Brewer, 1979; Rothbart & Park, 1986). Further research in this vein has been concerned with distinguishing between different types of knowledge structures and determining their possible differential impact on social perception. For example, Andersen & Klatzky (1987) differentiate between trait

prototypes and social stereotypes, demonstrating that the latter are richer in informational content and are characterised by a more complex network of asociative links. Social stereotypes are therefore better articulated and more predictive knowledge schemata than are trait structures. Andersen, Klatzky & Murray (1990) also find faster information processing of stereotyped-based structures as against trait-based structures.

As with recall and processing time, little has been specified about the internal organisational structure of representations. Identifying the structure of various representations is a potential area for representations research. Representations would differ in their internal organisation on the basis of their content, complexity and salience to the individual or group. As with schemata, Abric (1984) has proposed that a representation is composed of a number of interdependent and hierarchical elements. These elements are organised and structured around a nucleus or core. The structural core is said to have two essential functions: an organising function which unifies and stabilises the links in the representation and a creative function in which the core determines the meaning and value of the elements in the representation. For example, some nuclei are characterised by a strong affective component which determines the resultant evaluative links in the representation.

Van Dijk (1988) has also emphasised that the structure and organisation of representations can tell us a lot about the social nature and fuctions of representations. His work on racism in discourse has found that representations of minority groups are structured and organised around five major themes: origin (where do they come from?); appearance (what do they look like?); goals (what are they doing here?); culture (what kind of culture do they have?) and personality (what are their modal personality characteristics?). Herzlich's (1973) work on health and illness in French society found the contents of such representations to be structured around an individual-society dichotomy. These studies come close to locating the core of their respective representations, in that the central theme(s), around which other elements are organised, have been identified. More generally, Billig (1988) has proposed that the major task of social representations research is to look for countervailing themes implying that representations are characterised by a contradictory structure.

The study of structure, in addition to content, is therefore an important task for social representations research. The nature of the acquisition of the represenatation will play a role in the determination of internal structure, just as is likely to be the case with schemata. At issue may be the nature of the experience that produces individual cognitive schemata, as against shared social schemata or representations. Since some schemata, such as social stereotypes, are assumed to be highly consensual (Andersen & Klatzky, 1987), it may be possible to investigate the organisational structure of social representations with the methodology utilised by reserachers in the schema literature. However, unlike schema research, the social, ideological functions of the way in which representations are organised should be a central feature. For example, schema research has had little to say about why schemata characterised by dominance relations are linearly organised. How is this reflected in the wider society, and what ideological or group motivations and interests maintain and perpetuate such a structure?

The origins and development of representations and schemata.

Social schema theory says very little about the social origins of schemata or 'where they come from' (Eiser, 1986). Consistent with the North American intellectual tradition, schemata have been conceptualised within an individualistic perspective. Schemata are seen as cognitive structures which exist inside individuals' heads. Apart from research on prototypes and highly consensual and unambiguous event and role schemata, little theoretical or empirical work has been done to ascertain the degree to which various schematic structures may be shared, or how they may arise from social interaction and communication. For example, a great deal of research has been done into the way in which self-schemata may guide behavioural interaction, but there has been little research into the effect of the experience of interactions upon self-relevant structures (cf Markus & Wurf, 1987).

Schema theory states that schemata are learned or are acquired over time from direct and indirect experience with the social environment. Through experience, we are said to build up a large repetoire of schemata (Rumelhart, 1984). Whilst it is generally agreed that little is

known about the process of schema acquisition (Higgins, Kuiper & Olson, 1981; Rumelhart, 1984), the processes of acquisition that are referred to are generally asocial in nature. For example, Rumelhart & Norman (1978) refer to three processes involved in the learning of schemata. The first process is called 'accretion', a sort of fact learning from which memory traces are formed and stored for later retrieval. The second process is referred to as 'tuning', in which existing schemata are refined and changed to make them more in line with experience. Finally, 'restructuring' is a process by which new schemata are created via patterned generation and schema induction. Higgins, Kuiper & Olson (1981) concern themselves with the question of whether the mode of acquisition (induction vs propositional transmission; simultaneous vs successive instances; partial vs continuous congruent instances and concentrated vs dispersed instances) may influence the interaction between stored social information and subsequent incoming information. Is subsequent incoming information assimilated into existing social information, or does it lead to a modification or accommodation of the stored information?

More recently, Fiske & Dyer (1985) demonstrated the generalisability to meaningful social stimuli of Hayes-Roth's (1977) nonmonotonic learning theory for nonsense syllables. The obtained positive and subsequent negative transfer learning effects support the theory that schema development proceeds from an initial learning of a number of independent and unintegrated components to a single and integrated schematic unit with strong associative links between the components. These associative links become strengthened through experience and use, so that the entire structure is activated by triggering any of its components.

Notwithstanding the importance of these processes in schemata acquisition and learning, these processes do not convey the social essence of such knowledge structures. Are any of these knowledge structures shared and, if so, by whom and by how many? What is the nature of the social distribution of such structures; i.e., are there group variations in the content of such structures? Although we are told they are derived from experience, we are not told if particular schemata are more prevalent than others, because they are created and permeated by social institutions or particular social groups for a particular purposes -

whether it be for ideological motivations or for general socio-cultural system-support. Furthermore, content is not seen as influencing schema acquisition in a significant way. Rather, the processes of schema development are assumed to be universal across different content domains and across different groups of people. Cognitive developmental theory has assumed that the acquisition of social knowledge proceeds in logical, sequential and universal developmental stages, which are internally controlled by the cognitive capacities of the individual. Group differences, which have been found in the content of social cognition, have not been interpreted as reflecting genuine variations in the social distribution of knowledge, but as differences in stages of cognitive development (Emler, 1987). This issue of group variations in social knowledge will be explored in more detail in chapter 4.

Although the theory of social representations does not say very much about the processes involved in the acquisition and development of representations, it does contrast with schema theory by categorically placing the study of cognitive structures within a societal and social interactional context. Social representations is a theory which is inherently social in its understanding of the means whereby cognitions develop and change. Social representations originate from social interaction and construct the understanding of the social world, enabling interaction between groups sharing the representation (Moscovici, 1985). The theory's clear imperative is to look for group differences in the content and structure of social knowledge. The theory also provides a rich model for the need to study social interaction as the sine qua non of social cognition.

There is an obvious need for the introduction of a developmental perspective, in both social schema and social representations research, to delineate more clearly the processes of acquistion and development of knowledge structures. This need will be addressed in chapters 3 and 4 of this thesis.

The stability of schemata and representations.

While there has been some research investigating the responsiveness of social schemata to change (Weber & Crocker, 1983), generally, it has been assumed that social schemata, once developed and strengthened through use, are stable and static structures. As a unified

structure, a social schema is activated as a unitary whole, even when only one of its components is accessed (Fiske & Dyer, 1985). In contrast, representations are regarded by Moscovici to be dynamic and changing structures. He refers to the continual renegotiation of social representations during the course of social interaction and communication by individuals and groups. This suggests that such cognitive structures may be context dependent - changing or being modified by situational constraints and disconfirming experiences. An historical perspective here is important (Gergen, 1973). Certainly, social schematic research has proceeded in an ahistorical direction. Contrast this to the work by Jodelet (1984) who focuses, in the social representations tradition, on the changing and historically dependent representations of the body (Compare also Ostrom, 1989).

Moscovici refers to representations as being imbued with a life force of their own: merging, repelling and interacting with other such structures and, indeed, with individuals and groups, suggesting a certain dynamism and changing quality that is absent from the social schema literature. However, once these structures are transformed into material and objective entities, they are said to become fossilised or static - their origins forgotten, coming to be regarded as common-sense. This, of course, bears some similarity to the notion of schematic structures being unified and activated almost automatically through the associative links in the structure. Thus, whilst both theories suggest that once developed these cognitive structures may become resistant to change, they differ in the emphasis they place on the degree to which representations and schemata are flexible and dynamic during their course of development and contextual use. Furthermore, the social representations literature suggests that, after a period of unquestioning acceptance or fossilisation, subsequent sociological or historical forces may act to renegotiate and/or totally transform these structures.

McKinlay & Potter (1987) see the historically prescriptive nature of representations on the one hand, and the dynamic and changing nature of representations on the other, as a contradiction in Moscovici's theory. They argue that the strength of the former thesis negates the possibility of change. On the contrary, one may ask what is history, if not the resolution of the contradictory forces of tradition and change. Billig (1988) argues quite

clearly that social cognition research should be about the study of contradictory cognitive processes and countervailing themes in human thought. The study of social representations presents a vehicle for studying such contradictory processes: how tradition is preserved and protected at certain historical times, and challenged or overhauled at others.

Abric (1984) has proposed that a representation may change if there is a radical threat to the central organising structure of the representation - the nucleus. Change in the meaning and values attached to the peripheral elements will only lead to superficial change, but a transformation in the nucleus will change the whole nature and structure of the representation itself. The study of structure and identifying the stabilising core of representations may, therefore, be the vehicle by which to study the dynamic processes of evolution and change in representations.

Conclusion.

Importantly, the major difference between the study of social representations and social schemata is that, whereas schema theory is essentially an information processing model articulated at the intra-personal level of explanation, the theory of social representations is much more than this. Unlike social schema research, social representations research does not limit itself to the study of simple cognitive structures, but is predominantly concerned with complex cognitive structures such as belief systems and cultural value patterns. As such, it is a much more ambitious theory necessitating multidisciplinary endeavours. Furthermore, Moscovici's concept of objectification, which has important implications for the sociology of knowledge, has no parallel in the social schema literature. As in schema theory, the theory of social representations attempts to understand individual psychological functioning, but by taking into consideration wider societal and social psychological processes. The two theories are therefore articulated at different levels of explanation. Certainly, the theory of social representations can provide schema theory with a much needed societal context but, at the same time, "social representations incontrovertibly partake of the nature of cognitive phenomena - even if certain of their characteristics partially escape being included within their framework" (Codol, 1984, p. 240).

Whilst it may not be possible to fully integrate the two theories, it is at least desirable for a more complete and detailed articulation between the two levels of explanation for what are, essentially, knowledge structure approaches to social cognition. Along with Farr (1987), it is believed that, once the link(s) between social representations and social cognition research is established, links between the latter and the study of ideology and the sociology of knowledge will be made possible. These links will be explored later in chapter 5 of this thesis. In the meantime, the next chapter will detail some empirical research which demonstrates the utility of integrating the concepts of social representations and social schemata.

Footnotes.

1. An earlier version of this chapter has been published in the British Journal of Social Psychology. M. Augoustinos & J. M. Innes (1990). Towards an integration of social representations and social schema theory, **29**, 213-231 (see Appendix E).

2. While Fiske & Taylor (1991) cite a paper by Moscovici in their recent second edition of **Social Cognition**, there is no mention of Moscovici in the Name Index. Fiske & Taylor cite Hewstone Jaspars & Lalljee's (1982) research but only refer to the intergroup attributional findings, making no reference to social representations theory.

Chapter 3

The Development of Consensual Knowledge Structures.

Introduction:

There are several themes emanating from the attempted integration of social representations and social schema theory in the preceding analysis, which could be explored empirically. Some of these themes form the foundation for a pilot study detailed in this chapter. These themes centre around three basic issues: (1) the socially shared nature of knowledge structures emphasised by social representations theory, but given little priority by social schema theory and research; (2) the development of socially shared knowledge structures; and (3) the internal organisation of knowledge representations.

Given the unresolved nature of the consensus issue in empirical studies of social representations thus far, the present study is an exploratory and descriptive investigation of the development of consensus in social representations. One possible avenue for studying consensus is from within a developmental perspective. Notwithstanding the possibility of diversity, Moscovici's theory would predict that, with increased age and therefore increased social communication and interaction, representations of the social world become more consensual in nature. Thus tracing the path of the acquisition and development of representations may be a viable way of studying the nature and degree of consensus in representational structures. Within the schema literature, Taylor & Crocker (1981) have argued that the development of schemata is one of the most potentially important areas of investigation in schema research.

The aim of the pilot study was to elicit representations of a social nature: the nature and structure of society. This was achieved by exploring respondents' perceptions about the various social groups which constitute society. Socioeconomic classes, ethnic, racial and political categories of people may be compared and contrasted to ascertain information about the way people cognitively represent such social groups. A procedure which may be used to analyse data about such cognitive representations is multidimensional scaling (MDS). MDS is a mathematical procedure which represents spatially the perceived similarities and dissimilarities of objects, as in a map. The resultant map, or psychological distance between objects, reveals dimensions relevant to the subjects (Schiffman, Reynolds & Young, 1981).

MDS as a research tool has been applied to a variety of social psychological areas. Most notable has been its use to investigate social interaction episodes (Forgas, 1976; 1978) and person perception, interpersonal relations and communication (e.g., Davison & Jones, 1976; Jones, Sensenig & Haley, 1974; Peruin, 1976; Wish, 1975; Wish, Kaplan & Deutsch, 1976). It has also been applied to the study of the structure of attitudes and beliefs, particularly in the area of political beliefs and judgements (Marcus, Tabb & Sullivan, 1974; Sherman & Ross, 1972; Warr, Schroder & Blackman, 1969). Within the sociological literature, MDS has been applied extensively by Coxon & Jones (1979) to the study of occupational preferences.

In keeping with the tradition of social representations research, MDS is an exploratory and descriptive technique but, at the same time it allows quantification and description of complex social psychological phenomena (Forgas, 1979). The resultant representations which are produced by the procedure can be contrasted and compared between sample groups and subjects. It therefore can indicate the degree of similarity between different representations, as well as yield information about the way a representation is internally organised and structured.

To assess the utility of the MDS procedure for eliciting data regarding representations of the social structure, the procedure was administered to two pilot samples. The first was a high school student sample (year 9, aged 13 to 14 years) and the second was an adult university student sample. In addition to assessing the viability of the methodology for different age groups, the age differential in the two samples allowed for a preliminary assessment of the likelihood of the presence of developmental differences in the content and structure of social representations. The time between adolescence and adulthood was chosen, since it represents a formative period of development during which cognitions about the social world become more structured, coherent and increasingly reflective of social, cultural and political identifications (Sears, 1984). There was also emphasis on the extent to which representations of social groups within society are social; i.e., the extent to which they are shared. Is there some degree of consensus between individuals and across groups about how society is structured, or do such cognitive representations characteristically differ between

individuals and within groups? Given the criticisms that studies in social representations to date use aggregate measuring techniques, and therefore actually assume consensus rather than test it empirically (Potter & Litton, 1985; Potter & Wetherell, 1987), a mulidimensional scaling analysis sensitive to individual differences was utilised to analyse the data.

Method:

Sample:

The first pilot sample comprised of a year 9 class at a government (public) school in the outer northern suburbs of Adelaide. The class included 11 females and 12 males. Mean age was 13.36 yrs, Sd, 0.45 yrs. Parental consent was obtained by the use of the Education Department's parental consent form procedure. The MDS exercise was completed by all students during class time. The data were collected in March 1986.

Approximately 70 Psychology III students undertaking a course in 'Social Cognition' were asked to participate in the study. Questionnaires were to be completed in the students' own time. Completed questionnaires were received from 24 students (34.29% response rate). These comprised eight males and 16 females. Mean age was 23.29 yrs, Sd, 6.3 yrs. Data from the adult students were collected in mid-1986.

Multidimensional Scaling Procedure:

Before the year 9 respondents were presented with the stimulus material for the MDS analysis, they were asked to specify what they perceived to be the main social groups in society. An open-ended question: "Our society is made up of various groups of people. What do you think are the main groups that make up society?" was asked, in order to determine what social categories of people are voluntarily provided by respondents. This would provide some idea about what social groups are most salient to the respondents, and could be compared to the specified groups which were chosen for analysis.

Information about the multidimensional scaling procedure, including instructions about how to judge the stimuli, were given to students during a preliminary practice session. This involved using a practice set of stimuli unrelated to the ones used in the main research. The instructions were as follow:

During this experiment you will be judging how similar or different a number of stimuli are. You will be comparing them two at a time. For us to know how similar or different you find each pair to be, we will have you mark a form for us. (Pass forms around.)

You can see that on the form there is a line with the words 'same' at one end and 'different' at the other. If you find no difference between the two groups make a mark at the end of the line by "same". If you find there is a difference make a mark somewhere along the line showing how much difference you find.One thing we would like you to remember is that different people judge things in different ways. This means that there are no right or wrong answers. Two stimuli that are very similar to one person may be quite different to another. Both results are important to us. We are interested in finding out how you as an individual compare these stimuli.

Let's now practice marking these forms, and then see if you have any questions. Imagine you are comparing four fruits: oranges, lemons, mandarines, and grapefruits. We are going to ask you to compare them two at a time. There will be six pairs in all. You should have six forms in front of you stapled together. Use one form for each pair. Remember all you have to do is to make a mark on the line showing how similar or different you feel each pair to be. Any questions? (Schiffman, Reynolds & Young, 1981).

After this practice session a list of the social groups used as stimuli in the main exercise was read out to the students. To keep the number of comparisons to a minimum, 12 stimulus categories were selected (Schiffman, Reynolds & Young, 1981). Categories were selected on the basis of their representativeness of the broad spectrum of society. These included groups reflecting Australia's (a) socioeconomic spread (upper class, middle class, working class, unemployed); (b) ethnic and racial diversity (migrants, refugees, aboriginals); (c) structural decision-makers (big business, trade unions, politicians); and (d) gender relations (men, women). Although some of the categories are over-inclusive, (e.g., migrants) these 12 groups seem to represent the most salient participants in Australian society at a collective level.

Respondents were presented with pairs of social groups and asked to indicate the degree of similarity between the two. Following Schiffman, Reynolds & Young's (1981) recommendation, a 5-inch undifferentiated line scale was used for the younger sample. A value of zero meant that the two stimuli were perceived as exactly the same. Large numbers represent a lot of dissimilarity and, as such, these data will subsequently be referred to as dissimilarity data. In all, respondents made 66 paired comparisons. Each stimulus pair

appeared on a separate page and the order of presentation was randomised across subjects. No additional information was given to subjects about the stimulus groups used in the scaling exercise (see Appendix A1 for questionnaire layout).

The procedure for completing the MDS exercise differed slightly for the Psychology III students. They were presented with pairs of social groups and asked to indicate on an 8 point (0-7) <u>differentiated</u> scale the degree of dissimilarity between the two. A differentiated scale was used in this sample to facilitate coding for data preparation. The set of stimulus groups was increased to 20. This included the 12 stimulus groups used with the previous sample and the following additional groups: (13) small business; (14) welfare recipients; (15) farmers; (16) professionals/executives; (17) blue-collar workers; (18) white-collar workers; (19) multinational corporations; and (20) home-owners. This stimulus set increased the number of paired comparisons from 66 to 190. Stimulus pairs did not appear on separate pages, as with the previous sample. The order of stimulus pairs was randomised using a random number procedure. A second version of the questionnaire presented the stimulus pairs in the reverse order. Half the sample received the second version (see Appendix A2 for questionnaire layout). Instructions for completion of the questionnaire were as follow:

> During this exercise you will be judging how similar or different a number of groups are from each other. You will be comparing these groups two at a time along a broken line marked with the words 'same' at one end, and 'different' at the other. If you find no difference between the two groups place a tick above the portion of the broken line closest to the same end. If you find some difference, place a tick above the broken line showing how much difference you find. We would like you to remember that different people judge things in different ways. This means that there are no right or wrong answers. Two groups that are very similar to one person may be quite different to another. Both views are important. We are interested in finding out how you as an individual compare these groups.

An illustrative example was presented comparing the two fruits, mandarines and oranges. One marked scale indicated no difference and one demonstrated some difference (see Appendix A2).

<u>MDS Analyses:</u>

The individual dissimilarities matrices for each sample were subjected to an Individual Differences Scaling (INDSCAL) analysis. By an iterative procedure, INDSCAL (Carroll & Chang, 1970) produces two kinds of output. First, a group space of stimulus points is provided, which is a 'compromise' solution of the individual matrices. Second, unlike other MDS programmes, INDSCAL assumes that the salience of dimensions will vary between subjects and thus also provides dimension weights for each subject. Each subject's weights modify the group space by stretching or shrinking it, to approximate more closely to the individual's own data. It is therefore possible to describe each subject's own personal space, but only in respect to the <u>group</u> dimensions arrived at by the INDSCAL solution. By using this programme, the degree of sharedness in representations can thus be determined by the extent of individual differences in dimension salience.

The MDS procedure alone elicited information about the placement of stimuli along particular dimensions. The <u>nature</u> of these dimensions could only be inferred post hoc. It was therefore necessary to obtain additional information from respondents in order to identify the dimensions the MDS procedure would yield. This information was obtained from the year 9 subjects, but was not collected for the Psychology III sample.

<u>Attribute Ratings:</u>

A structured method of determining the nature of the resultant dimensions is through the use of attribute ratings. Year 9 respondents were asked to rate each stimulus social category along 20 specified 5-inch undifferentiated scales. These scales included the following: (1) active-passive; (2) wise-foolish; (3) important-unimportant; (4) independent-dependent; (5) rich-poor; (6) powerful-weak; (7) successful-unsuccessful; (8) respect authority-do not respect authority; (9) interesting-boring; (10) work hard-lazy; (11) strive to do well- do not strive to do well; (12) sensitive-insensitive; (13) competitive-cooperative; (14) stingy-generous; (15) vote for Labor Party-vote for Liberal Party [1]; (16) excitable-calm; (17) friendly-unfriendly; (18) happy-unhappy; (19) educated-uneducated; (20) intelligent-not intelligent (see Appendix A3 for instructions and questionnaire layout).

These scales were used to elicit information about how the various groups in society are construed; that is, which attributes of the social groups were important to the subjects when they were making their similarity judgements. Thus the attribute judgements aid in the interpretation of the INDSCAL configurations. The vector model (phase IV) of the PREFMAP programme (for details see Coxon, Jones, Tagg, Muxworthy & Prentice,1981) was used to find within the resultant INDSCAL space a direction of 'best fit' of vectors representing each attribute on which the groups were rated. The direction of the vector indicates increasing amounts of the attribute, and the projection of each stimulus group on to the attribute vector indicates the amount of the attribute possessed by the stimulus group. Multiple regression is the procedure used to determine the direction of each attribute vector, and multiple correlation coefficients indicate the goodness of fit of each vector. If the multiple correlation coefficient is large, then the correlation between the stimulus projections and the attribute values is high. This indicates that an attribute is related strongly to the stimulus space and that subjects were using this attribute, or a strongly related attribute, when making their similarity judgements. Low correlations indicate a poor fit between stimuli projections and attribute values (Schiffman, Reynolds & Young, 1981). The programme also provides direction cosines which indicate the angle between each attribute vector and each dimension of the INDSCAL solution. Collinearity between attribute vectors and dimensions are indicated by the closeness of the cosine value to one.

Results:

Overall, 173 responses were provided by the year 9 sample in response to the open-ended question: "Our society is made up of various groups of people. What do you think are the main groups that make up society?" Mean number of responses given = 7.52, min = 2, max = 19. Table 3.1 presents the 12 general categories that were used to classify the 173 responses and the corresponding frequencies and percentages for each category. The minimum number of categories used by any of the Ss was 1; the maximum number of categories used was 6, mean = 3.48. Table 3.1 also presents the number of respondents who mentioned the following categories at least once. Notable is the salience of the socioeconomic category - 70% of the students mentioned a socioeconomic group at least once. The most

frequently cited of these groups were: unemployed (10), employed (7) and poor, working class, middle class, higher class (4). Over half the respondents cited religious groups at least once - 'religious people' or 'church-goers' were mentioned by 8 students. A considerable number of students also cited groups in category 2 - blacks/ aborigines (6), whites (2), migrants (4). Approximately 35% of Ss gave responses classified under the social category. This included groups such as 'skins', 'punks', 'surfies', and 'rockers'. The deviant category included groups such as criminals, druggies/junkies, rapists and graffiti writers. The institutional/political category included responses such as government (3), unions (1) and anti-nuclear (1).

Table 3.1: Responses to,"What do you think are the main groups that make up society?"

Response Categories	Frequ.	%	no. of Ss	%
1. socioeconomic	44	25.43	16	70
2. social	27	15.61	8	34.78
3. racial/ethnic/geographical	24	13.87	10	43.48
4. age	14	8.09	5	21.74
5. religious	13	7.51	12	52.17
6. deviant	13	7.51	6	26.09
7. institutional/political	11	6.36	6	26.09
8. occupational	8	4.62	6	26.09
9. gender	6	3.47	3	13.04
10.sexual	5	2.89	3	13.04
11.familial	4	2.31	3	13.04
12.health	3	1.73	2	8.70
Total	173	100		

These open-ended responses from the younger respondents provide some external validation for the selection of the social groups used in the MDS exercise. It is clear that socioeconomic categories are very salient, even for these young subjects. The inclusion of social class categories as well as groups representing the interests of these categories (trade unions, big business) would therefore seem justified. Ethnic and racial categories were also frequently cited by the respondents. While the ethnic and racial categories used as stimuli in the MDS procedure were very general and non-specific (e.g., refugees, migrants) this was of methodological necessity for two reasons. First, the number of stimuli used had to be

limited, otherwise an increased set would lead to an exponential increase in the number of comparisons required. Secondly, the inclusion of specific ethnic and racial groups other than 'aboriginals' would have affected the nature of the exercise, resembling one geared towards measuring inter-ethnic group perceptions and relations. Clearly, while ethnic and racial groups need to be included in any analysis of the representation of Australian society, the use of general categories was thought to avoid these methodological concerns. It is also understandable that some groups which were of major salience to young people do not feature in the selected categories. This is particularly so for the groups which were mentioned in the social category. Interestingly, the frequency of the religious category was not anticipated.

The Group Space: Year 9s.

The INDSCAL programme requires the user to provide a random number to produce the initial configuration from which successive iterations are made to improve goodness-of-fit between input data and fitted values. The iterative procedure terminates when it meets the criterion threshold in improvement in fit. Following Schiffman, Reynolds & Young (1981), this was set at .005. To ensure that an optimal and stable solution is reached, the user is recommended to make a number of runs in different dimensionalities and using different random number starts (Coxon, et al, 1981).

For the 23 individual matrices of the year 9 sample, several 5 to 2 dimensional runs were made using different random numbers, all of which produced similar group space configurations and goodness-of-fit values. Three runs were also made in 3 to 2 dimensions which produced overall lower goodness-of-fit correlations. These group spaces, although substantially similar, differed in the location of some stimulus points. Given the replicability of the 5-dimensional solutions, one of these was chosen as the most stable and optimal solution.

The 5-dimensional solution of the data accounted for 49% of the variance. Dimension 1 accounted for 18.69% of the variance; dimension 2, 10.34%; dimension 3, 9.13%; dimension 4, 5.91%; and dimension 5, 4.65%. Goodness-of-fit correlations ranged from

0.59 to 0.88 (average subject r = 0.77). Selecting the appropriate number of dimensions for further analysis in an INDSCAL solution is problematic. Most MDS programmes provide stress values which guide the selection of dimensions. In weighted MDS models, the user is guided by two principles: (1) the amount of variance accounted for by the separate dimensions; and (2) interpretability. Since dimensions 4 and 5 do not add substantially to the overall variance, it is reasonable to select the first 3 dimensions for detailed analysis (which account for 38.16% of the group variance) on the basis of the first principle.

The off-diagonal elements in the Sum of Products for the group space shown below indicates that the dimensions are not completely orthogonal. There is some degree of correlation between the first 3 dimensions. This lack of orthogonality between dimensions was found in all the 5 to 2, and 3 to 2 dimensional runs, indicating that it is a stable feature of the data itself and does not reflect problems in convergence with the INDSCAL programme (Schiffman, et al, 1981).

Sums of Products for Year 9 Group Space

	Dim 1	Dim 2	Dim 3
Dim 1	1.00		
Dim 2	-0.34	1.00	
Dim 3	-0.47	0.43	1.00

Figure 3.1 presents the group stimulus space in 2 dimensions (1 & 2). The resultant configuration is not easily interpretable in a dimensional or linear manner. It is difficult making sense of the gradual linear ordering of the stimulus groups along either dimension 1 or dimension 2. The configuration is more amenable to a 'neighbourhood' analysis (Coxon, 1982). There are three major 'neighbourhoods' or 'clusters' of stimulus groups, the groups forming each cluster being perceived as relatively similar to each other. The first cluster in the upper left-hand quadrant, spilling over into the upper right quadrant, is a rather loose junction of the following groups: aborigines, unemployed, refugees and migrants. The lower left-hand quadrant contains the second cluster: working class, middle class and trade unions; and the bottom right-hand quadrant contains a very tight cluster: big business, upper class
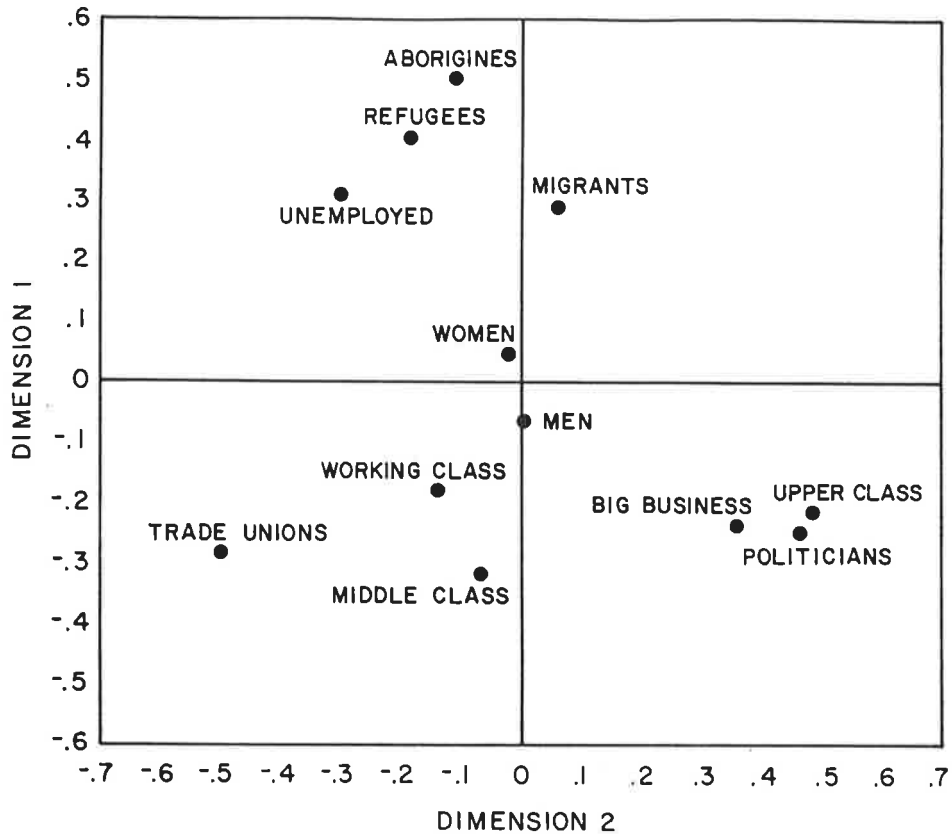
FIGURE 3.1 : Group Space Solution for Year 9 Sample (Dimensions 1&2)
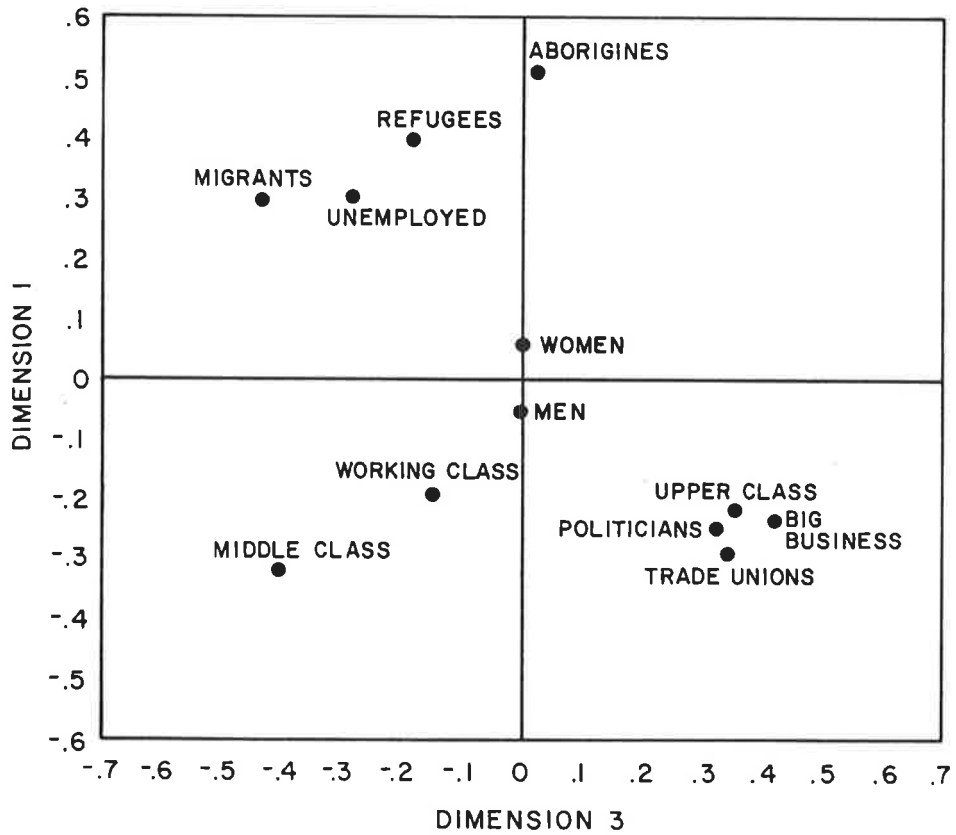
FIGURE 3.4 : Group Space Solution for Year 9 Sample (Dimensions 1&3)

and politicians. The positioning of the groups 'women' and 'men' in the middle of the configuration is somewhat more ambiguous than the positioning of the other stimulus points.

Since the groups appeared to be located in three major clusters, further analysis of the data using a hierarchical clustering programme (Johnson, 1967) was undertaken as an aid in the interpretation of the configuration (Coxon, 1982). Figures 3.2 & 3.3 show the hierarchical clustering of the stimulus groups, based on a single matrix of averaged dissimilarity measures. The averages used were mean values for the 66 paired comparisons. These averaged dissimilarity matrices are presented in Appendix A4.

The HICLUS procedure begins by treating each stimulus as a separate cluster. At each stage of the clustering procedure more similar stimuli are joined together to form a cluster before less similar stimuli. At the highest level, all stimuli form one undifferentiated cluster (Johnson, 1967).

Figure 3.2 presents the HICLUS solution using the 'connectedness' method, while Figure 3.3 presents the clustering solution using the 'diameter' method. Comparing the clustering solutions, it is clear that they differ slightly. Both solutions contain the three clusters evident in the INDSCAL configuration. However, they differ in their allocation of the stimulus groups 'women' and 'men'. The minimum or connectedness method allocates both women and men to the second cluster (middle class, working class, trade unions), whereas the maximum or diameter method allocates women to cluster 1 and men to cluster 2. Johnson (1967) says of such a dilemma:

> ". . . to the extent that there is an appreciable departure between the HCS's obtained by the Maximum and Minimum methods, the results of the Maximum method have appeared to be the more meaningful or interpretable. That is, the search for compact clusters (of small over-all 'diameter') has proved more useful than the search for internally 'connected' but potentially long-chain clusters." (p. 252)

Using the diameter (maximum) method as the most optimal clustering solution to interpret the INDSCAL configuration, it is clear that the first cluster contains groups in Australian society that traditionally have been perceived as the oppressed, the down-trodden and the disadvantaged. The third cluster is also easily interpretable. These three groups represent wealth and power in Australian society. The second cluster is slightly ambiguous.

UPPER CLASS
POLITICIANS
BIG BUSINESS
MIDDLE CLASS
WORKING CLASS
MEN
WOMEN
TRADE UNIONS
UNEMPLOYED
ABORIGINES
MIGRANTS
REFUGEES

22
23
27
32
40
42
42
43
44
45
53
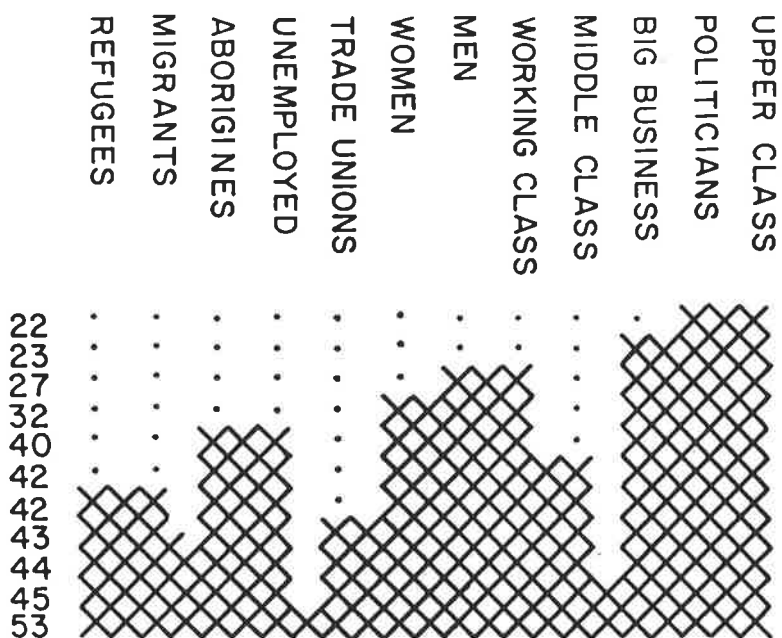
FIGURE 3.2 : Hiclus Solution - Connectedness Method

UPPER CLASS
POLITICIANS
BIG BUSINESS
MIDDLE CLASS
WORKING CLASS
MEN
TRADE UNIONS
UNEMPLOYED
ABORIGINES
WOMEN
MIGRANTS
REFUGEES

22
27
28
40
42
43
54
57
70
87
121
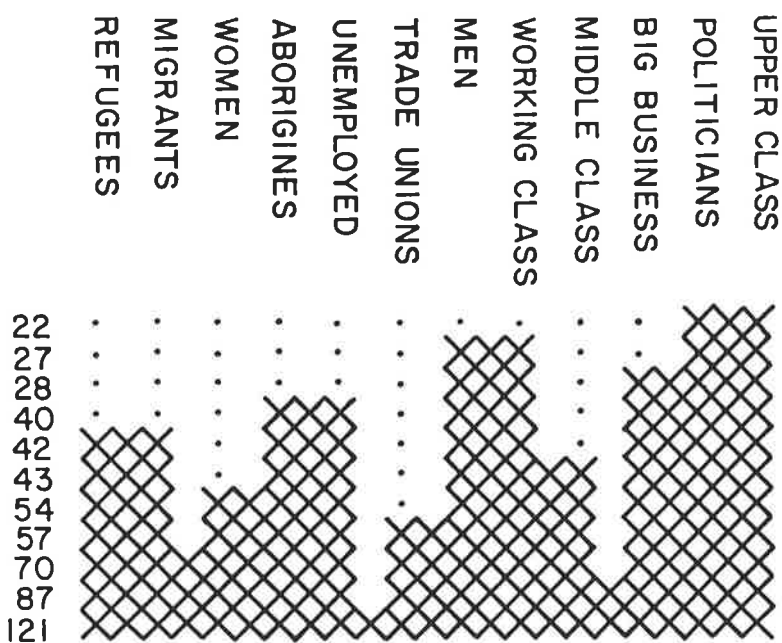
FIGURE 3.3 : Hiclus Solution - Diameter Method

Although trade unions, men and working class are often synonomous categories, middle class is more difficult to explain. The spatial representation of Figure 3.1 also lends itself to a general interpretation of 'outgroups' vs 'ingroups'. The division of groups in the upper quadrants from those in the bottom demonstrates this clearly.

Figure 3.4 presents the third dimension yielded by the INDSCAL solution against dimension 1. The most notable feature in this configuration is the location of 'trade unions', which is placed in the upper class, politicians and big business cluster. Thus, whilst this category was differentiated from the power, wealth cluster in the first 2-dimensional space, at another level trade unions are perceived as being similar to these social categories. This, no doubt, reflects the participation of trade unions in decision-making activities with these groups, especially business and politicians. Negotiations, conflict and controversy between these three groups is a salient daily feature of Australian political life.

Results from the PREFMAP solution can be used to interpret further the resultant 3-dimensional space yielded by the INDSCAL analysis. The fourth column of Table 3.2 indicates the multiple correlation coefficient between the three dimensions and the attribute rating scales (see Appendix A5 for means and standard deviations for the attribute rating scales). The first three columns present the direction cosines (regression weights) on each of the three dimensions of the INDSCAL solution. The year 9 sample obtained significant multiple correlation coefficients for the following attributes: rich, wise, respect authority, powerful, successful, important, competitive, educated and intelligent. All these attributes, except for 'competitive' have large regression weights on dimension 1. This supports the previous interpretation that dimension 1 differentiates between social groups, which are recognised as being wealthy, powerful and successful, and those which are not. There are no attributes with both significant multiple correlation coefficients and a large regression weight on dimension 2, thus making the interpretation of dimension 2 difficult (even intuitively). This is probably reflective of the inappropriateness of a dimensional analysis of the data, given its clustering nature. Dimension 3 can be interpreted, in line with the previous comments, as one which differentiates between social groups on the basis of their competitevness ($R= 0.97$, regression weight $= 0.82$). Trade unions, politicians, business

and the upper class were regarded as possessing more of this attribute than the other social groups.

Table 3.2: PREFMAP (attribute-fitting) solution for year 9 sample.

Vectors	Direction Cosines			
	1	2	3	R
active	-0.76	-0.62	-0.22	0.69
wise	-0.91	0.36	0.21	0.80 *
independent	-0.95	-0.30	-0.08	0.49
rich	-0.66	0.66	0.36	0.99 **
powerful	-0.79	0.40	0.47	0.95 **
successful	-0.77	0.56	0.30	0.94 **
respect authority	-0.93	0.25	-0.27	0.83 *
interesting	-0.83	-0.22	-0.52	0.48
work hard	-0.93	-0.03	-0.37	0.60
strive to do well	-0.99	-0.00	0.02	0.69
sensitive	-0.72	-0.22	-0.66	0.69
competitive	-0.44	0.37	0.82	0.97 **
vote for Labor	-0.50	-0.86	-0.08	0.55
excitable	-0.75	-0.53	-0.39	0.54
friendly	-0.71	-0.01	-0.71	0.63
educated	-0.91	0.40	-0.11	0.90 **
stingy	0.40	0.34	0.85	0.76
happy	-0.77	0.33	-0.55	0.66
important	-0.89	0.09	0.45	0.83 *
intelligent	-0.87	0.48	-0.13	0.85 *

*p < 0.05   **p < 0.01

Group Space: Psychology III Sample

The individual dissimilarities matrices for the 24 Psychology III students were also subjected to an INDSCAL analysis (the averaged dissimilarity matrix for this sample can be found in Appendix A4). Two separate analyses were carried out. The first analysis was performed on the same set of 12 stimulus groups administered to the younger sample (66 paired comparisons). The second analysis was performed on the expanded stimulus set (20 groups: 190-paired comparisons).

12 Stimulus Groups:

Four INDSCAL runs were made in 3 to 2 dimensions with different random number starts. The resultant group spaces were substantially similar, although there were variations in orientations of axes and small differences in the location of some stimulus points. The configuration chosen as the most optimal for analysis was one which accounted for considerably more of the variance, yielded better goodness-of-fit correlations (range = 0.64 to 0.88, average subject $r = 0.76$), and displayed high orthogonality between the three dimensions (one run produced a very high correlation between dimensions 2 and 3, $r = 0.9$).

The chosen 3-dimensional INDSCAL solution on the 24 data matrices accounted for 57.08% of the variance - dimension 1= 38.83%, dimension 2= 11.75%, and dimension 3= 6.5%. Dimensions 1 and 2 will be presented for analysis, given that (1) the first two dimensions account for most of the group variance, and (2) they are readily interpretable. Figure 3.5 presents this solution. Unlike the INDSCAL solution for the younger respondents, the solution for the Psychology III students lends itself well to a linear or dimensional interpretation. The linear ordering of groups along dimension 1 appears to reflect a socio-economic scaling of the groups. The stimulus groups increase in terms of wealth and socioeconomic status as one moves down the dimension. This socioeconomic dimension is the single largest dimension, accounting for a substantial amount of the variance. The second dimension is somewhat more difficult to define. The groups 'women', at the outermost left end of the axis, and 'men' at the right end, may be used as useful anchor points to guide interpretation. Groups such as trade unions, working class, big business and
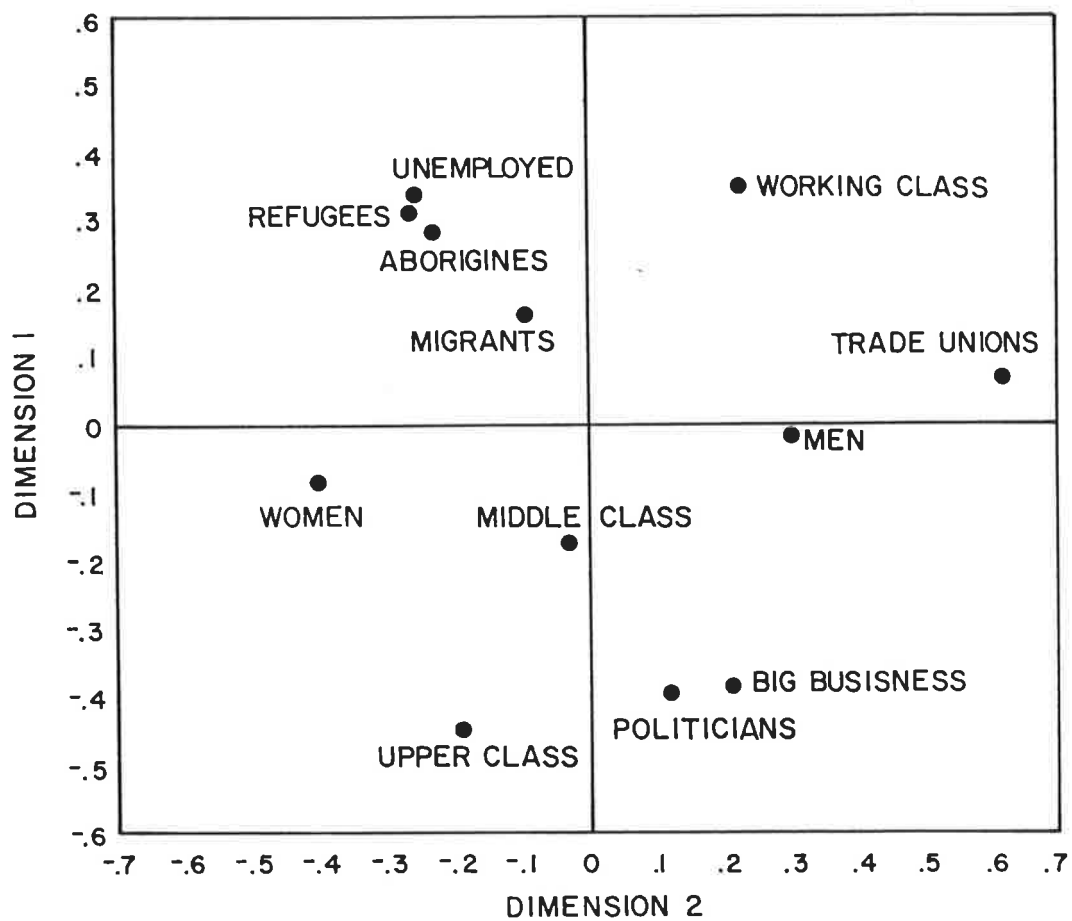
FIGURE 3.5 : Group Space Solution for Adult Sample 12 Stimulus Groups
(Dimensions 1&2)

politicians are associated with men. On the other hand, refugees, unemployed, aborigines and upper class lie close to women. It may be reasonable to suggest this to be a 'hard-soft' dimension, or 'agentic-communal' dimension (Bakan, 1966).

20 Stimulus Groups:

Four 3 to 2 dimensional INDSCAL runs were performed on the 20 stimulus groups data, using different random number starts. These produced group configurations with subject average goodness-of-fit correlations ranging from 0.63 to 0.73. Differences in the location of some of the stimulus points were evident in the configurations. This did not affect significantly the overall interpretation of the first dimension, but did so for dimensions 2 and 3.

The 3-dimensional solution chosen as the most optimal yielded an average subject goodness-of-fit value of 0.73 (range = 0.63 to 0.85), and accounted for 43.5% of the variance. Dimension 1 accounted for 23.83% of the variance, dimension 2, 10.25%, and dimension 3, 9.42%. The dimensions were not completely orthogonal, as shown in the off diagonal elements in the <u>Sum of Products</u> group space below. All four runs produced similar non-orthogonal solutions (one sub-optimal run yielded very high correlations between the dimensions).

<u>Sums of Products for Psychology III Group Space.</u>

	Dim 1	Dim 2	Dim 3
Dim 1	1.00		
Dim 2	-0.41	1.00	
Dim 3	-0.40	0.27	1.00

Figure 3.6 demonstrates that, as with the 12 stimulus groups solution, dimension 1 can be interpreted as a socio-economic dimension with working class and upper class at opposite ends. Although generally the groups are ordered linearly along such a dimension, there are some anomalies; e.g., middle class is positioned along dimension 1 at the same level as
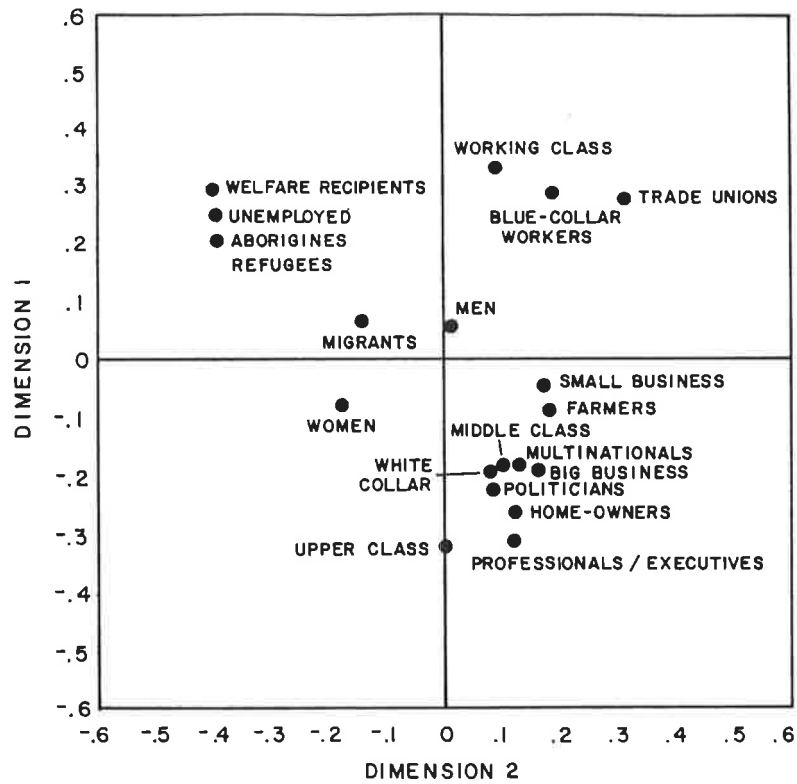
FIGURE 3.6 : Group Space Solution for Adult Sample
20 Stimulus Groups (Dimensions 1&2)
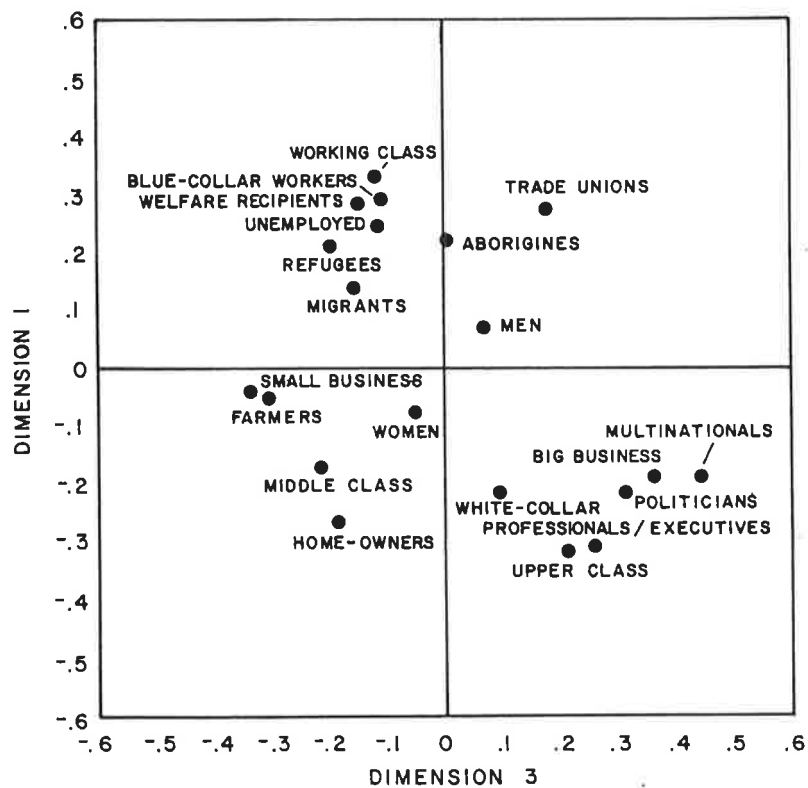
FIGURE 3.7 : Group Space Solution for Adult Sample
20 Stimulus Groups (Dimensions 1&3)

multinationals and big business. Indeed, with the increased number of social categories, there seems to be considerable congestion of groups at the upper end of the socioeconomic scale. Dimension 2 is more difficult to interpret. The 'hard-soft', 'agentic-communal' interpretation for the second dimension in the 12 stimulus groups solution may also be applicable here. Again, women are associated with the traditionally oppressed and powerless groups, and men with the more powerful, professional and economically participant categories.

Figure 3.7 plots dimensions 1 and 3. Since dimension 3 accounts for almost as much of the variance as dimension 2, it is worth considering. Although this configuration is not immediately interpretable, groups positioned on the left-hand side of the space are groups which received a lot of media coverage during the year 1986, notably for their financial hardship. Many media stories covered the plight of the Australian farmer. A prolonged drought and associated rising costs pushed many farmers out of their livelihood. Small businesses were also being represented by the media as battling against rising labour costs and 'crippling' government charges and taxes. The great Australian pursuit of home ownership was also under threat, with many media stories about young families and couples being unable to meet mortgage repayments because of rising interest rates and increases in the cost of living. Along with these groups are the 'traditional battlers' - the aborigines, women, the unemployed and welfare recipients.

The Subject Space: Year 9s

Subject dimension weights give information regarding the degree of variation between subjects in their cognitive representations of the 12 stimulus groups. Subject weights on the first 2 dimensions can be found in Appendix A6. Weights on dimension 1 range from .03 to .69, and on dimension 2 range from .03 to .56. It is clear that there is considerable individual variation in weights between subjects. This is illustrated more clearly in Figure 3.8. Figure 3.8 represents the positioning of the 23 subjects in relation to the salience they ascribe to dimension 1 and dimension 2. Each subject is represented by a weight vector, drawn from the origin of the space. For the data matrices of subject numbers 6 and 3, dimension 2 is
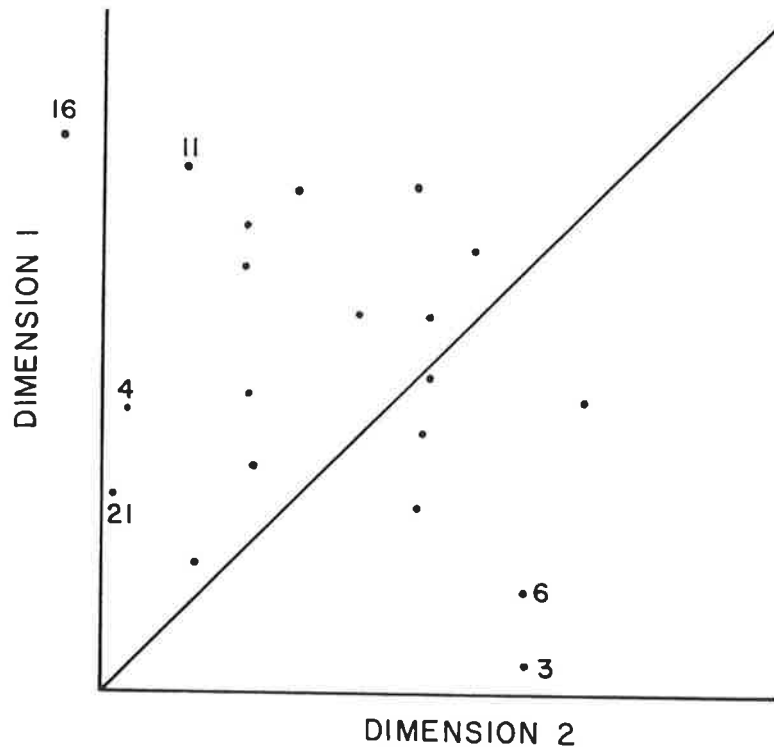
FIGURE 3.8 : Year 9 Subject Space, Dimensions 1&2
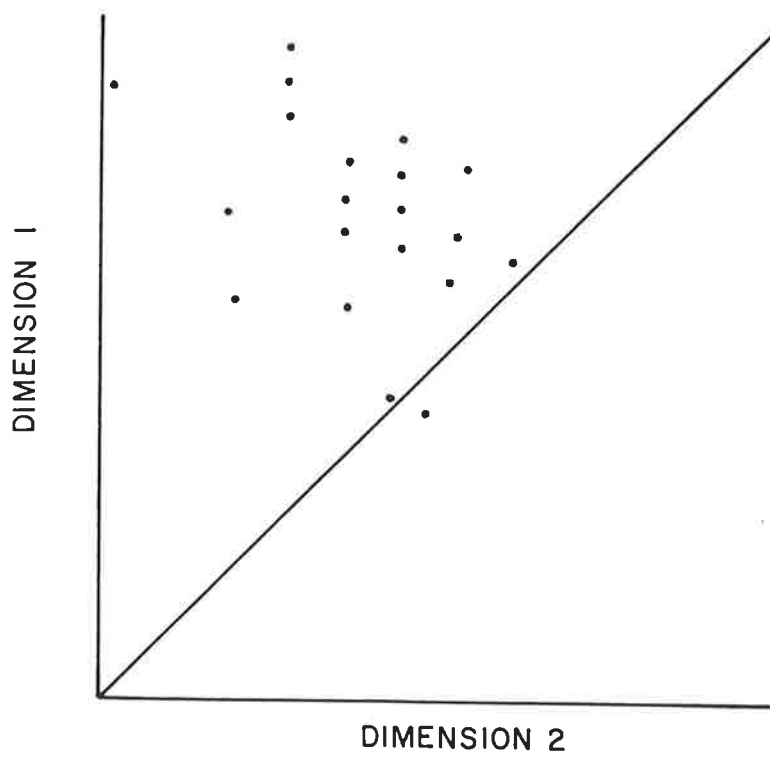
FIGURE 3.9 : Adult Subject Space, Dimensions 1&2 for
12 Stimulus Groups

much more salient and important than dimension 1, whereas for subject numbers 16, 21, 4 and 11, dimension 1 is significantly more salient. For those subjects whose weight vectors are close to the weight vector pointing at a 45 degree angle from the two dimensions, both dimensions are equally important. The length of each subject's vector demonstrates the amount of variance that is acounted for in the subject's data by the MDS solution: the longer the vector, the greater the amount of variance explained (Schiffman et al, 1981).

Subject Space: Psychology III
12 Stimulus Groups:

Subject weights for the first two dimensions are presented in Appendix A6. Interestingly, most subjects' weights on the first dimension are relatively large, ranging from 0.38 to 0.83. Subject weights for dimension 2 range from 0.10 to 0.51. Figure 3.9 presents the subject weight vectors for the 2 dimensions. In this graphical form, it is evident that there is not the same degree of individual variation as was found in the younger sample. Every subject has accorded dimension 1 with more importance than second dimension .[2] Socio-economic status appears to be a very important evaluative criterion for the present sample. It is interesting to speculate whether the reduced degree of subject variance in the perception of these groups by the older repondents reflects a process in the developmental nature of social cognition, suggesting increased consensuality in representations with increased age.

To further substantiate this trend, the standard deviations of each comparison (66) were compared between the two age groups[3]. The standard deviations were rank-ordered for decreasing variance. A Friedman's two-way analysis of variance by ranks indicated that the mean ranks of the standard deviations differed significantly between the two samples ($Xr^2 = 44.18$, df=1, p<.001). Sixty out of the 66 comparisons (90.9%) had standard deviations which were smaller for the older age group (see Appendix A7 for the rank ordering of the SDs).
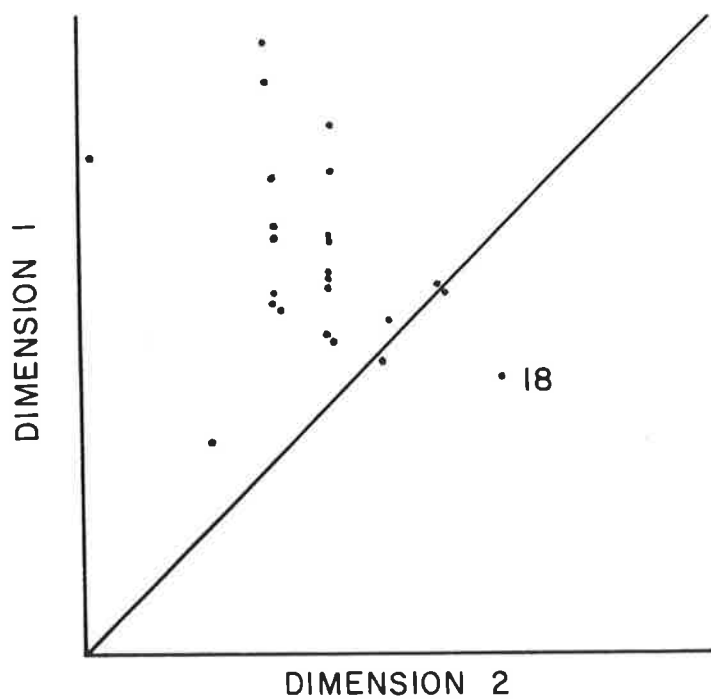
FIGURE 3.10 : Adult Subject Space, Dimensions 1&2 for
20 Stimulus Groups
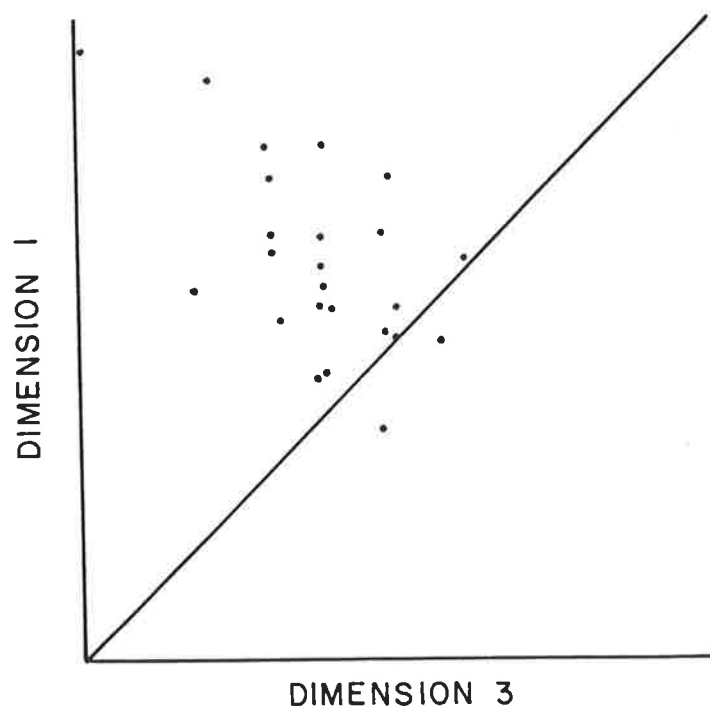
FIGURE 3.11 : Adult Subject Space, Dimensions 1&3 for
20 Stimulus Groups

20 Stimulus Groups:

Figure 3.10 presents the weight vectors for each subject for the first two dimensions. Actual subject weights for the three dimensions can be found in Appendix A6. Again, the socio-economic dimension is more salient than the 'hard-soft' dimension for most of the subjects (except for subject number 18, who weights dimension 2 more heavily than dimension 1). There is, however, greater subject variation in dimension salience for the 20 stimulus groups as compared to the 12 stimulus groups. Even so, the variation is not as great as in the younger sample. This is also evident in Fig 3.11 - the subject space for dimension 3 plotted against dimension 1.

Discussion:

Two major and interesting findings which require further reflection have emerged from the pilot study. One is the different organisational structure of the representation in the two samples, and the other is the reduced degree of subject variance in the representation in the older sample. Both findings are suggestive of important developmental changes in representations of the social structure with increased age.

Looking at the organisational nature of the representation, it is clear that with the younger sample a clustering analysis represents more accurately the nature of the sample's cognitive organisation of the social groups. It is reasonable to suggest that these younger respondents did not perceive these social groups as varying gradually along linear dimensions, but as discrete 'types' or categories (Togerson, 1965).

This is in clear contrast to the adult respondents who structured the representation along a linear vertical hierarchical socioeconomic dimension. This finding suggests developmental changes in the schematic representation of the social structure, shifting from a clustering structure to a dimensional structure with increased age. How or why this comes about is not clear, but one can speculate that with increased age comes increased social contact with, and awareness of, social groups and their relative position in society. The linear scaling of groups along more socioeconomic or 'class' lines may represent a 'fine tuning' of such

representations so that they come to reflect more closely the actual or, at least, what is emphasised to be the actual structure of society.

While structural differences were evident in the representations, it must be kept in mind that the actual meaning or interpretation of the representations did not differ substantially. The younger respondents clearly differentiated between those groups which represent wealth, success and power and those which do not. The PREFMAP results show this clearly. Consistent with cognitive developmental theory (e.g, Turiel, 1983), it could be suggested that structuring social stimuli on the basis of similarity into types or clusters, as compared to a dimensional scale, may simply reflect a less complex form of cognitive organisation: one more likely to characterise the cognitive operations of younger subjects. This proposition would need further research to confirm, and is more specifically addressed in the following chapter.

The 'hard-soft' dimension which emerged in the adult sample for both the 12 and 20 stimulus solutions is of significant interest. This dimension looks very much like the agentic-communal dimension which pervades the sex-role literature (Bakan, 1966; Spence & Helmreich, 1978). It is unclear whether such a dimension would have emerged without the prompting of the gender categories. This dimension may have emerged also as a result of the disproportianate number of females (n=16) to males (n=8) in the adult sample. This female 'bias' is reflected in the class enrolment for this course.

To check the latter possibilty, an analysis of angular variation (ANAVA) was undertaken to detect possible gender differences in dimensional salience[4]. Schiffman et al (1981, chapter 13) detail a relatively new branch of statistics called 'directional statistics', which is specifically suited to test subject space differences in angular variation. While a difference in the respective female and male subject spaces was evident, this difference was not statistically significant (F = 1.52, df = 1, 22, p = .25). The full ANAVA table and transformation of the data can be found in Appendix A6.

It remains unclear whether this dimension indeed reflects a meaningful and perhaps cultural way of categorising social objects. McGuire (1986) has recently suggested the possibility of the existence of a fundamental cognitive structure organised around the male-

female polarity. Indeed, studies in the cognitive representations of occupational hierarchies have found a masculine/ feminine dimension along which occupations are organised (Shinar, 1975; Rowell, 1985). These studies and the present one provide some support for McGuire's proposition regarding a fundamental masculine/ feminine cognitive schema.

The third dimension which emerged in the 20 stimulus set solution is also of considerable interest, since it suggests the sensitivity of the MDS procedure in reflecting external socioeconomic pressures and peculiarities specific to an historical moment. As mentioned previously, the groups positioned on the left-hand side of the space were constantly in the media during 1986. The existence of this dimension may highlight the changing nature of representations, and emphasises their plasticity and responsiveness to external historical forces: a point stressed by Moscovici in his writings. The socioeconomic dimension (dimension 1) could be thought of as a relatively stable or 'core' representation of the social structure, around which other subsidiary dimensions are organised, the latter being less static and more responsive to changes in society.

The reduced degree of individual variation found in the older respondents, both in the dimensional salience ascribed to their respective INDSCAL solutions and in their dissimilarity ratings of the 66 pairs, suggests that representations of the social world become more consensual or shared as socialisation proceeds from early adolescence to adulthood.

The present study therefore provides empirical support regarding the consensual nature of social knowledge structures. The methodological advantage of the present study over others in the social representations tradition is that, while the nature of the representation is determined by an overall averaging technique, INDSCAL also takes into account the degree of individual variation in dimension salience. It assesses the measure of fit of each individual's personal representation with that of the overall group space.

The increased 'sharedness' in the perception of the social groups no doubt comes from increased contact with and knowledge about social categories within a society. This social knowledge does not take place in a vacuum, but is guided by a society's cultural institutions and normative prescriptions. Tajfel and Forgas (1981) say this about the process of social

categorisation - the process which fundamentally characterises the MDS procedure used in the present study.

> "Social categorisation lies at the heart of commonsense, everyday knowledge and understanding. The way an individual or a culture identifies similarities and differences between persons and groups in their milieu is the foundation on which everyday social intercourse is based. Social categorisation is thus much more than a purely cognitive task; it is central to social life, and as such, it is subject to the pressures and distortions of the rich and variegated culture within which it arises" (pp. 114-115).

Consensual structures demonstrate the social nature of cognition: that the societal context within which cognitive and affective processes take place interact with and determine individual processes. The greater the degree of social consensus about the nature of a phenomenon in society, the more likely it is that an individual will select and organise information about the object in accordance with societal expectations (Tajfel, 1978a). What is often viewed as an individual cognitive process is really a product of wider social-psychological processes and influences.

The existence of increased consensus in social knowledge found in this study demonstrates how the theory of social representations can add a wider social dimension to more mainstream knowledge structure approaches in social cognition, as in schema models. Certainly the results of this pilot study point to the relevance of both the schema concept and the concept of social representations: the former as a cognitive structure, which guides the selection and processing of incoming social information about social categories and/or individuals representing these categories, and the latter as a cognitive structure which is essentially consensual in nature and social in origin.

The question which remains at this present stage of analysis is whether these two main developmental findings - the change in representational structure and increased consensus about the nature of the represenattion - are robust and therefore replicable. Only then can it be argued with any degree of confidence that these findings indeed reflect developmental changes in social knowledge structures. This forms the main foundation and purpose of the following chapter.

Footnotes:

1. In Australia, the Liberal Party represents the interests of conservative groups and should not be confused with the British Liberal Party or with the American meaning of "small 'l' liberal".

2. While directional statistics such as an 'Analysis of Angular Variation' (ANAVA) is specifically designed to detect sample differences in dimension salience in weighted MDS models like INDSCAL, this analysis can only be performed if the obtained subject weights all refer to the same stimulus space (see Schiffman et al, 1981, p. 300). In the present study, subject weights are obtained from two separate INDSCAL analyses. An INDSCAL analysis on the combined data from both samples is inappropriate, since this would produce an 'averaged' solution or compromised group space which would obscure sample differences in representational structure. The resultant subject weights would therefore reflect this compromised solution.

3. Given the different scales used in the MDS procedures between the two samples, one undifferentiated (0 - 127 mm), and the other differentiated (0 - 7 point scale), the younger sample's data were rescaled in order to make direct comparisons with the older sample's SDs. Dissimilarity values between 0 - 15 mm were rescaled to coincide to a value of 0 on the differentiated scale, $16 - 31 = 1$,
$$32 - 47 = 2,$$
$$48 - 63 = 3,$$
$$64 - 79 = 4,$$
$$80 - 95 = 5,$$
$$96 - 111 = 6,$$
$$112 - 127 = 7.$$

4. See individual subject weights for the adult sample in Appendix A6. Asterisk denotes male subject weights. These weights are normalised in order to perform an analysis of angular variation (ANAVA) on the data.

Chapter 4

Socioeconomic Group Differences in the Development of Consensual Structures.[1]

Introduction:

As with theory and research in social cognition, interest has been demonstrated recently in making points of contact between social representations theory and developmental psychology (Duveen & Lloyd, 1989). This is not surprising, given the acknowledged influence of Piaget on Moscovici's theoretical formulations (Moscovici, 1990). Piagetian theory's focus, on the manner in which the child gradually and actively learns to understand and represent both the physical and social worlds, can be accommodated by the constructivist position taken by social representations theory. If social representations exist as knowledge structures which are socially constructed and communicated to understand everyday life, then the child is not only born into a physical world but also into a world of representations, a 'thinking society'. How does the child come to be psychologically influenced by representations, not as a passive object but as an active participant in his or her everyday lived social experience? How do representations ultimately contribute to and constitute the individual's social identity? These are some of the questions which have been posed by developmentalists who have embraced Moscovici's theory of social representations.

Duveen & Lloyd (1989) have proposed that, as with Piagetian theory, social representations should be viewed as a genetic theory in which the structure of any social representation at a point in time is a result of a developmental process. The authors differentiate between three types of processes by which social representations exert a psychological influence on development: sociogenesis, ontogenesis and microgenesis.

Sociogenesis describes the process of generation and diffusion of social representations which are adopted and reconstructed by different social groups throughout society. Of course, much of this social knowledge originates from the reified scientific world, but such knowledge is also generated within everyday social discourse and interaction. Ontogenesis refers to the process by which children learn and adopt the social representations of their community. As mentioned previously, this is not a passive process but one in which the child actively reconstructs and elaborates existing representations. At any one moment some representations are more psychologically active than others, particularly if they are bound to a

person's sense of social identity (Duveen & Lloyd, 1986). The microgenesis of social representations refers to the ways in which social representations and their associated social identities are activated in everyday interaction and communication. Representations which are evoked in social interaction help to establish a shared frame of reference so that communication can take place between individuals. They also define the social identities of the participants, and therefore help prescribe appropriate social relations in any social encounter. This is not to say that the representations and their associated social identities are static and unchanging. Any interaction can lead to their structural renegotiation. Since the three processes are interrelated and mutually influential, microgenetic processes can lead to ontogenetic transformations in representations, while sociogenetic changes will ultimately filter downwards, leading to changes at the ontogenetic and microgenetic levels.

Duveen & Lloyd(1989) apply the above developmental perspective to a number of their studies which have dealt with the social representations of gender among young children. These studies have investigated the developmental process by which preschool children internalise the dominant and consensual representations of gender. In a series of studies these authors have examined how children respond to external gender signals and use internalised gender signs in their play activity (Lloyd & Smith, 1985; Lloyd, Duveen & Smith, 1988). Their studies have shown that an internalised gender (social) identity does not occur until the age of two to 2 1/2 years. The child is only then able to represent internally the meaning of this identity, and is therefore able to enact it autonomously in everyday interaction.

Other developmental studies embracing the social representations perspective include Corsaro's (1989) research in both American and Italian nursery schools studying preschoolers' representations of adult rules, and Emler, Ohana & Dickinsons's (1989) review of several studies researching children's representations of authority and income inequalities. While within this developmental perspective interest has predominantly been on children's representations of social objects, there has also been a related interest in the representations adults have of the child and the status of 'childhood' (Chombart de Lauwe, 1984; D'Alessio, 1989; Molinari & Emiliani, 1989).

While there have been empirical studies linking social representations concepts with aspects of developmental theory, Emler has stressed the unique and distinctive contribution social representations theory lends to understanding the development of social knowledge (Emler, 1987; Emler, Ohana & Dickinson, 1989). While both theories stress the constructivist and active role of the child in grasping and understanding the social objects he or she encounters, the two theories have different views about the nature and status of social knowledge which surrounds the child and the processes by which the child acquires this knowledge. It is worthwhile following this argument in some detail, for it raises some crucial criticisms with respect to traditional developmental approaches (Emler, Ohana & Dickinson, 1989).

Emler and his co-workers have argued that developmental theory has been imbued with two major assumptions. First, socio-cognitive development is construed as a process by which the world presents physical and social objects and experiences to the child, which are then to be interpreted and understood correctly. Socio-cognitive development is seen as the sequential progress the child makes towards reaching adult levels of comprehension. Linked to this is the proposed cultural universality of the socio-cognitive sequence. While some developmentalists concede that cultural and social influences are of psychological importance, this is seen to influence only the content of social knowledge, not its structure. All social knowledge, it is argued, proceeds in the same sequential manner. Secondly, it is assumed that this process is internal, individual and self-generated by the child's increasing capacities to solve problems.

The theory of social representations challenges these central assumptions. First, it stresses that all knowledge is socially constructed by a given collectivity and, secondly, it insists that the attainment of knowledge is not an individual, internal process but a social one. The child is born into a community which has generated its own ways of understanding and interpreting. In the process of socialisation the child attains not only the content of this social knowledge, but also the dominant methods of thinking within the community. These are central features of a community's collective memory so that each child does not solely and

individually have to solve each problem encountered: solutions and methods are already provided for the child by his or her cultural collectivity.

" . . . if the social environment presents children with problems to be solved, it also presents them with solutions and arguments for solutions. Different social environments can present different solutions or different arguments, or both. . . . Thus the development of social knowledge is the development of knowledge about one's social group's stock of solutions and arguments about solutions. This does not mean that the child is simply the passive inheritor of these cognitive entities as a static body of cultural knowledge. On the contrary, these solutions are open to almost endless argument, . . . and the child is a potential participant in that argument." (Emler, Ohana & Dickinson, 1989, p. 52).

In addition, these authors point out that developmentalists have concerned themselves with the study of the application of mental principles which are assumed to be knowledge-free. Principles of moral judgement have been traditionally treated in this way, assuming that they reflect abstract cognitive operations which are independent of the social beliefs and values of individuals. Furthermore, while developmental psychology emphasises the active and constructivist role of the individual in social knowledge development, as an agent of action upon the environment, the authors also point out that virtually nothing is said about the effects of the environment upon the individual - that is, individuals are also the recipients of environmental action, over which they may have little control. Thus social knowledge is not only about what and how one can do things in the environment, but also about what and how the environment impinges upon the individual. There will be cause to return to these critical issues in the Discussion.

Aims of the Present Study:

One of the major implications resulting from the social representations perspective is that social knowledge will vary according to the social groups to which people belong. This, of course, has always been a defining feature of social representations theory and has been the object of empirical research, as outlined in Chapter 1 (Di Giacomo, 1980; Hewstone, Jaspars & Lalljee, 1982). One such study, which is of direct empirical relevance to the present research, is that of Emler & Dickinson (1985) who studied Scottish children's (aged 7 to 12

yrs) representations of economic inequalities. They found that, while there was considerable agreement in the rank orderings of four occupational groups (doctor, teacher, bus driver and road sweeper) in relation to estimates of income earned, middle class children perceived much greater income differentials between manual and nonmanual occupations than working class children, who did not separate the occupational groups as clearly on income estimates. This class difference was replicated in an American sample of similarly aged children, although a French sample of children did not yield such a clear-cut difference (Emler, Ohana & Dickinson, 1989).

There are elements in Emler and his coworkers' research which can inform the pilot research detailed in the previous chapter. Clearly, occupational income estimates are linked to perceptions of a society's social structure. One of the main findings of the pilot research was the salience and importance attributed to social and economic inequality as a dimension along which the social groups were organised: occupational income is an integral component of this socioeconomic structuring. However, the pilot research investigated only age differences in the representations of the groups, and did not look for specific social group differences. More specifically, Emler's research would predict possible socioeconomic group differences in representations of the social structure. People from varying socioeconomic sections of society may perceive differently the relations of the 12 social groups, reflecting group specific representations of society. The empirical research detailed in the present chapter was designed specifically to investigate this issue from within a cross-sectional age perspective.

As in the pilot study, the present study involved the use of an MDS procedure to elicit representations of the social structure of Australian society. Three student samples differing in age were asked to provide dissimilarities data of the social groups which characterise Australian society. In order to trace the path of representational acquisition and development more definitively, in addition to year 9 (13 to 14 yrs) and psychology III students, as were used in the pilot research, the present study included an intermediate age group (year 12 students, 16 to 17 yrs old). The aims and purposes of the present study were similar to those of the pilot study and essentially sought to substantiate pilot study findings. These were: (1)

the changing nature and structure of the representations with increased age; and, (2) the increase in sharedness in the representation with age. A further aim, in line with Emler's research, was to investigate socioeconomic group differences in representations of the social structure.

Method:

Sample:

The first sample comprised of year 9 classes from two schools representing different ends of the socioeconomic spectrum. School A is a government school on the northern outskirts of the city, servicing working class and lower middle class suburbs. School B is a wealthy non-government school providing private education to children of parents from predominantly middle (professional) to higher socio-economic backgrounds [2]. Forty-six year 9 students from School A comprised 15 females and 31 males. Mean age at the time of data collection was 13.67 yrs, Sd = 0.42. Fifty-three year 9 students from School B comprised 23 females and 30 males, mean age = 13.66 yrs, Sd = 0.42.

The second sample included two year 12 classes from the same two schools. The 28 students from School A comprised 14 females and 14 males, mean age = 16.84 yrs, Sd = 0.47. Thirty students from School B comprised 9 females and 21 males, mean age = 16.64 yrs, Sd = 0.41. All students were required to obtain parental consent to take part in the study, in accordance with the South Australian Education Department's guidelines. The data were collected in March 1987.

Approximately 65 third year psychology students undertaking a Social Cognition course were asked to participate in the study. Questionnaires were to be completed in the students' own time. Completed questionnaires were received from 41 students (63% response rate). These comprised 11 males and 30 females. Ages ranged from 19 yrs to 45 yrs (M = 25.73 yrs, Sd = 7.66). The sex ratio reflected the bias in the class enrolment. Data were collected in August 1987.

<u>Measures and Procedure:</u>

Multidimensional Scaling Procedure:

Information about the multidimensional scaling procedure, including instructions about how to judge the stimuli, was given to the year 9 and 12 students during a preliminary practice session. This involved using a practice set of stimuli unrelated to the ones used in the main research, in which students were asked to compare 6 pairs of fruits (oranges, lemons, mandarines and grapefruits). After the practice session respondents were given a list of the 12 social groups they would be comparing. No additional information was given to students regarding the nature and meaning of these groups. Students who had queries about the groups were told to make their judgements on the basis of any limited knowledge and vague understandings they had about the groups. The instructions for the practice session and main exercise were similar to those used in the pilot study (adapted from Schiffman, Reynolds & Young, 1981).

The social groups used as stimuli were the same 12 categories used in the pilot study. Respondents were presented with the 66 pairs of social groups and asked to indicate on a 9-point <u>differentiated</u> scale the degree of similarity between the two. A differentiated line scale was used in the present study in order to make coding easier for data analysis. Besides, little seemed to be gained from using an undifferentiated line in the previous pilot study. Eleven stimulus pairs appeared on each page. The order of stimulus pairs was randomised using a random number procedure. A second version of the questionnaire presented the stimulus pairs in the reverse order. Half the sample received the second version (see Appendix B1 for questionnaire layout). All students completed the exercise during a 40-minute class lesson.

The psychology students were given similar instructions for the multidimensional exercise but were not given a practice session. An illustrative example was included on the instruction page to aid students' understanding of the procedure. As in the pilot study, the expanded 20 stimulus set was administered to the adult sample. Again, the order of stimulus pairs was randomised using a random number procedure. A second version of the

questionnaire presented the stimulus pairs in the reverse order. Half the sample received the second version (see Appendix B2 for the 20 stimulus set questionnaire).

Data Analysis:

The paired-comparisons of the 12 stimulus groups and 20 stimulus groups were subjected to MINISSA analyses which use as input to the programme the averaged dissimilarities data of each student sample (see Appendix B3 for averaged dissimilarity matrices). Unlike INDSCAL, MINISSA (Michigan-Israel-Nijmegan Integrated Smallest Space Analysis) is a non-metric programme. One of the limitations of the INDSCAL programme is that it will only process a maximum of 30 individual subject matrices for each analysis. Since some of the samples exceed this maximum, it was thought more prudent to include all students' judgements to arrive at an averaged data matrix rather than 'judiciously select' a subset of each sample's judgements for an INDSCAL analysis.

The MINISSA programme is based on a Euclidean distance model which analyses internally (dis)similarities matrices by monotonely transforming the input data but preserving their rank order.

> "The aim of the algorithm is to position the elements as points in a space of minimum dimensionality so that a measure of departure from perfect fit between the (monotonically) rescaled data and the distances of the solution (STRESS) is minimised. Perfect fit occurs if a monotone transformation of the data can be found which forms a set of actual distances" (Coxon, et al, 1981, p. 8.3).

The programme minimises stress initially by using a 'soft squeeze' method. Once a minimum has been reached, the programme shifts to a 'hard squeeze' method in which values are fitted using a monotone regression procedure, which allows unequal data to be matched with equal fitting values. These values are known as $d^\wedge$ (DHATS) and are weakly monotone with the data (Coxon, et al, 1981).

To aid in the interpretability of the MINISSA configurations, the same averaged data matrices were subjected to a Hierarchical Clustering Solution (HICLUS) using the diameter method (Johnson, 1967). This technique aids in the identification of clusters that may exist in the MINISSA space. "The maximum (diameter) method picks out the largest distance within

a cluster as 'the' distance and seeks to minimise the diameter (largest distance between the objects) within a cluster" (Coxon, 1982, p. 103).

In addition to these analyses, the MINISSA solution for each sample was subjected to an Individual Differences Scaling (INDSCAL) analysis using the 'fix points' option to obtain the subject weights for each dimensional solution. The solution derived from a MINISSA analysis of averaged judgements can be submitted as a fixed configuration to the INDSCAL programme, along with the individual data matrices of each subject from which only subject weights are determined (Coxon et al, 1981). Of primary interest was the degree of individual variation in dimensional salience for each sample. In line with findings from the pilot study, it was expected that older respondents would obtain larger weights for the first dimension (usually the most important dimension, accounting for most of the variance) of their sample's solution, as compared to younger respondents who were expected to demonstrate a greater degree of individual variation in dimension salience.

Attribute Ratings:

Approximately half the respondents from each school sample; Year 9, School A (n = 23), School B (n = 26); Year 12, School A (n = 14), School B (n = 16), were asked to rate each stimulus social category along 17 nine-point differentiated scales. These scales included the following: (1) active-passive; (2) wise-foolish; (3) independent-dependent; (4) rich-poor; (5) powerful-weak; (6) successful-unsuccessful; (7) respect authority-do not respect authority; (8) interesting-boring; (9) work hard-lazy; (10) strive to do well- do not strive to do well; (11) sensitive-insensitive; (12) competitive-cooperative; (13) hard-soft; (14) vote for Labor Party-vote for Liberal Party; (15) excitable-calm; (16) friendly-unfriendly; (17) educated-uneducated. Questionnaires were completed during a 40-minute class lesson. Instructions reminded subjects that there are no right or wrong answers and that different people will judge the groups differently. The name of the group to be judged appeared on top of the page with the 17 rating scales positioned underneath (see Appendix B4 for attribute ratings

questionnaire). The order in which the stimulus groups appeared in the questionnaire was randomised for each subject. Data of this nature were not collected from the adult sample.

Data Analysis:

As with the pilot study, ratings on the attribute scales aided in the interpretation of the MINISSA spacial and HICLUS cluster configurations. Again, the vector model (phase IV) of the PREFMAP programme was applied to the data. Each sample's means and standard deviations for the attribute rating scales are presented in Appendix B5.

Results:

MINISSA solutions were obtained for all averaged data matrices in 5 to 1 dimensional solutions. Several factors are taken into account when selecting the optimal number of dimensions in a MINISSA solution. Along with general considerations, such as the number of stimuli used to generate the solution, interpretability and the amount of variance associated with each dimension, the user is guided by stress values associated with the various dimensionalities which are outputed by MINISSA programmes (Coxon, 1982).

Year 9 Samples

Table 4.1 provides the stress values for 1-5 dimensional solutions for the year 9 subjects. On the basis of the above factors, 3-dimensional soloutions seem optimal for both schools. For School A dimension 1 accounts for 59.23% of the variance, dimension 2 = 23.16%, dimension 3 = 17.61%. For School B, dimension 1 accounts for 63.54% of the variance, dimension 2 = 19.63% and dimension 3 = 16.83%. Increasing the dimensionality will decrease stress considerably for School B, but the variance associated with a fourth dimension is only 10.65%. It is evident from Figures 4.1 and 4.2 that the MINISSA solutions in the first 2 dimensions are very similar for both schools. There are three major 'neighbourhoods' or clusters of the stimulus groups, the groups forming each neighbourhood being perceived as relatively similar to each other. Both schools position the
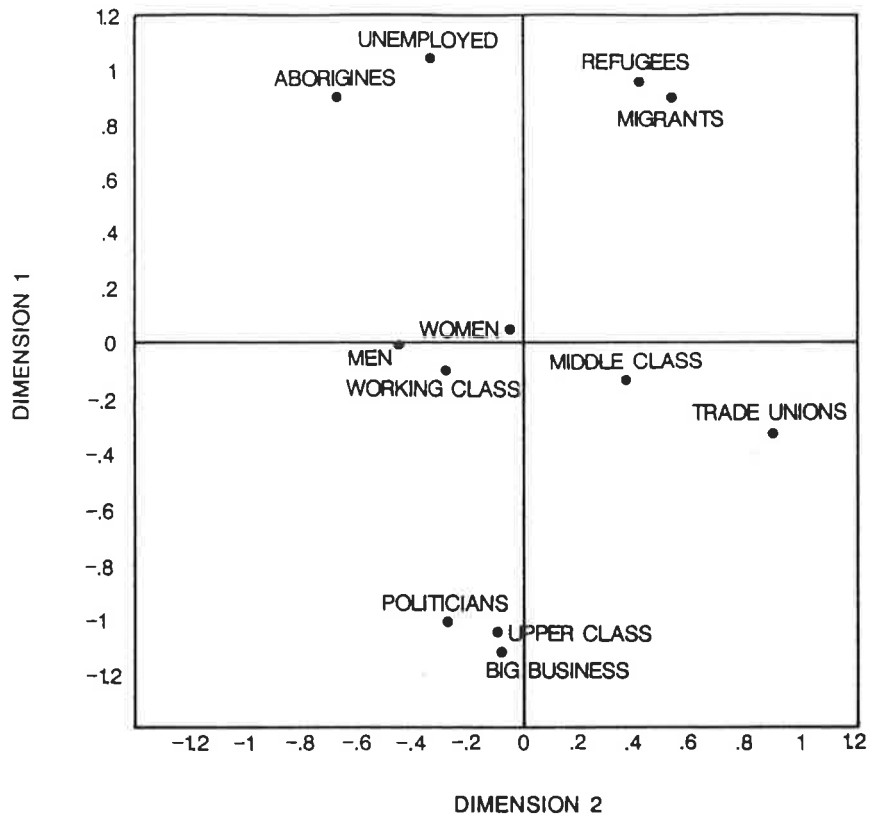
FIGURE 4.1 : Year 9, School A, Minissa Solution, Dimensions 1&2
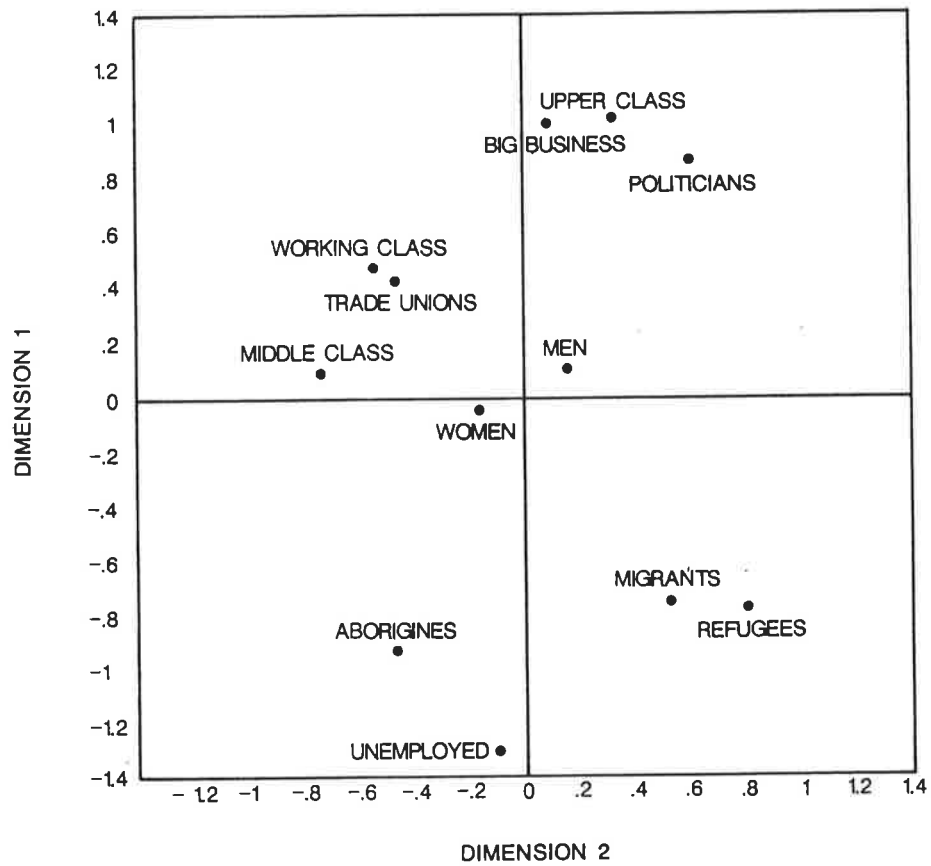
FIGURE 4.2 : Year 9, School B, Minissa Solution, Dimensions 1&2

groups upper class, big business and politicians very closely together. At the other end of dimension 1 is a loose junction of groups: the unemployed, aborigines, refugees and migrants. The remainder of the groups are positioned halfway between these two extremes. Within this middle cluster, School A positions working class very closely to trade unions, whereas School B perceives working class and men as very similar.

Table 4.1: Stress values for Year 9 samples.

	Dimensions				
	1	2	3	4	5
School A	0.230	0.142	0.085	0.054	0.042
School B	0.220	0.130	0.074	0.027	0.015

To aid in the interpretation of the MINISSA solution, the same averaged (dis)similarity matrices were subjected to a Hierarchical Clustering Programme using the diameter method. Figures 4.3 and 4.4 present the HICLUS solutions for schools A and B respectively. Again, the clustering solutions are relatively similar, producing the same three major divisions of groups as in the MINISSA solutions. Upper class, big business and politicians form a major cluster for both schools, with School A adding men to this cluster. Refugees, migrants, aborigines and unemployed form another major cluster for both schools. Although there are minor differences, the middle cluster is essentially similar, containing the groups middle class, women, working class and trade unions. For School B, the group men is included in this middle cluster.

As in the pilot study, both the MINISSA and HICLUS solutions separate dramatically groups which represent wealth and power from groups which represent the oppressed and the disadvantaged. The general 'outgroups' versus 'ingroups' distinction is replicated in the spatial representation of the groups in the present study. The PREFMAP solution for each school, presented in Table 4.2, also supports this interpretation.
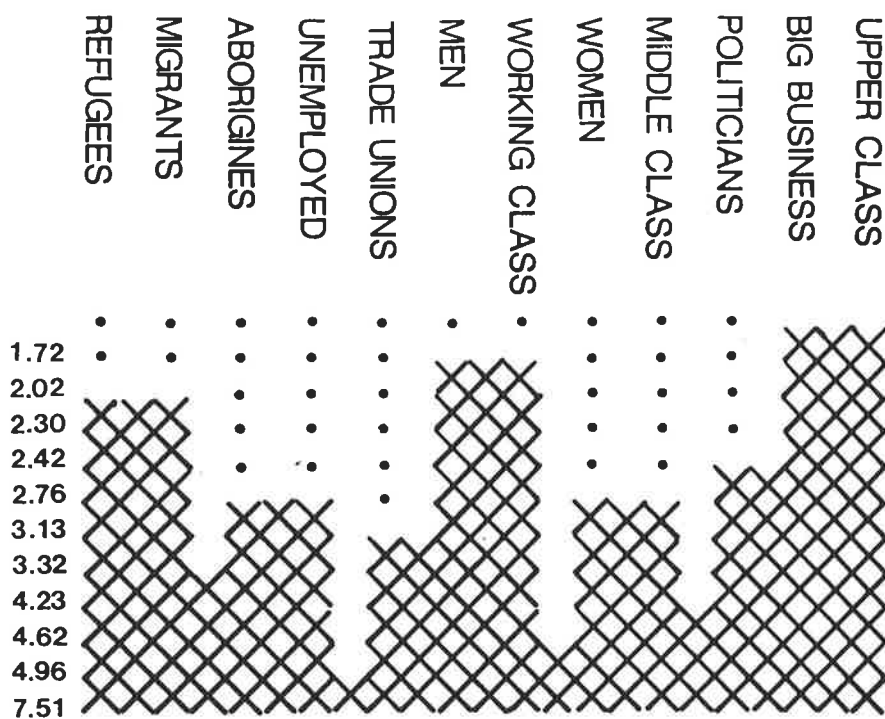
FIGURE 4.3 : Year 9, School A, Hiclus Solution
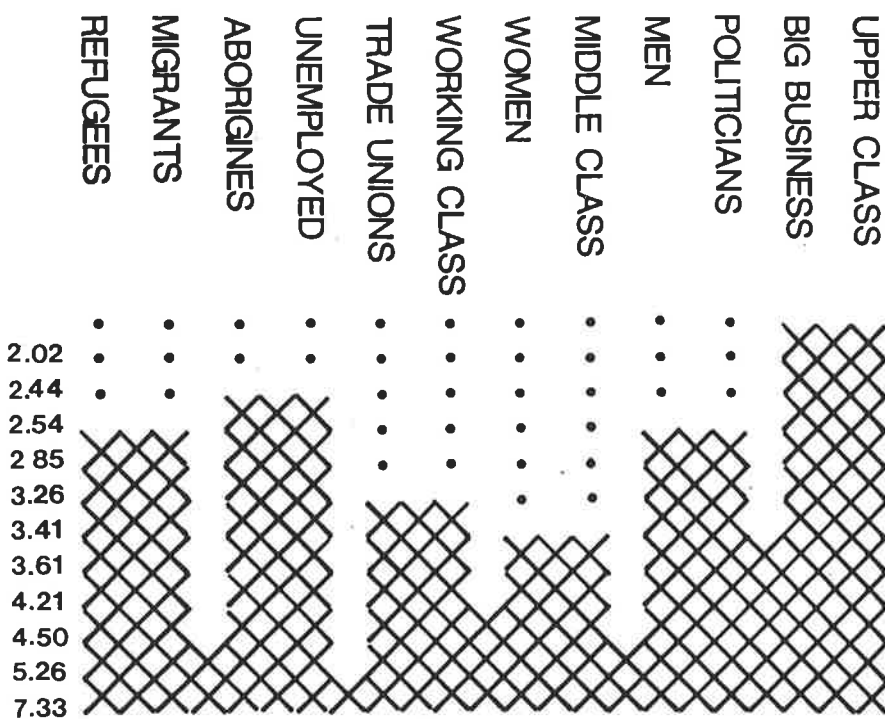
FIGURE 4.4 : Year 9, School B, Hiclus Solution

Table 4.2: PREFMAP (attribute-fitting) solution for year 9 samples.

| | School A | | | | School B | | | |
| | Direction Cosines | | | | | | | |
Vectors	1	2	3	R	1	2	3	R
active	0.88	-0.47	-0.06	0.79*	-0.89	0.32	0.33	0.80*
wise	0.84	-0.01	-0.55	0.94**	-0.89	-0.03	0.45	0.88**
independent	0.94	-0.34	0.02	0.86**	-0.94	0.28	0.19	0.83*
rich	0.99	0.12	0.08	0.97**	-0.99	0.05	-0.11	0.97**
powerful	0.97	-0.05	0.23	0.98**	-1.00	-0.00	-0.10	0.96**
successful	0.99	0.07	0.01	0.98**	-0.96	0.27	0.08	0.95**
respect authority	0.93	0.12	-0.34	0.92**	-0.72	0.43	0.54	0.69
interesting	0.77	-0.29	-0.57	0.73	-0.16	0.05	0.99	0.34
work hard	0.90	0.11	-0.42	0.78*	-0.59	0.26	0.76	0.71
strive to do well	0.90	0.23	-0.36	0.90**	-0.79	0.28	0.54	0.80*
sensitive	0.62	0.04	-0.78	0.87**	-0.94	0.09	0.32	0.22
competitive	0.85	-0.26	0.46	0.95**	-0.98	0.10	0.18	0.91**
hard	0.65	-0.18	0.74	0.75	-0.65	0.09	0.76	0.78*
vote for Labor	0.94	-0.13	0.33	0.92**	-0.21	0.98	0.02	0.67
excitable	0.86	-0.27	-0.43	0.65	-0.41	0.89	0.21	0.62
friendly	0.55	0.14	-0.82	0.77	0.21	-0.42	0.88	0.35
educated	0.94	-0.06	-0.19	0.96**	-0.99	0.13	-0.08	0.84*

*p < 0.05   **p < 0.01
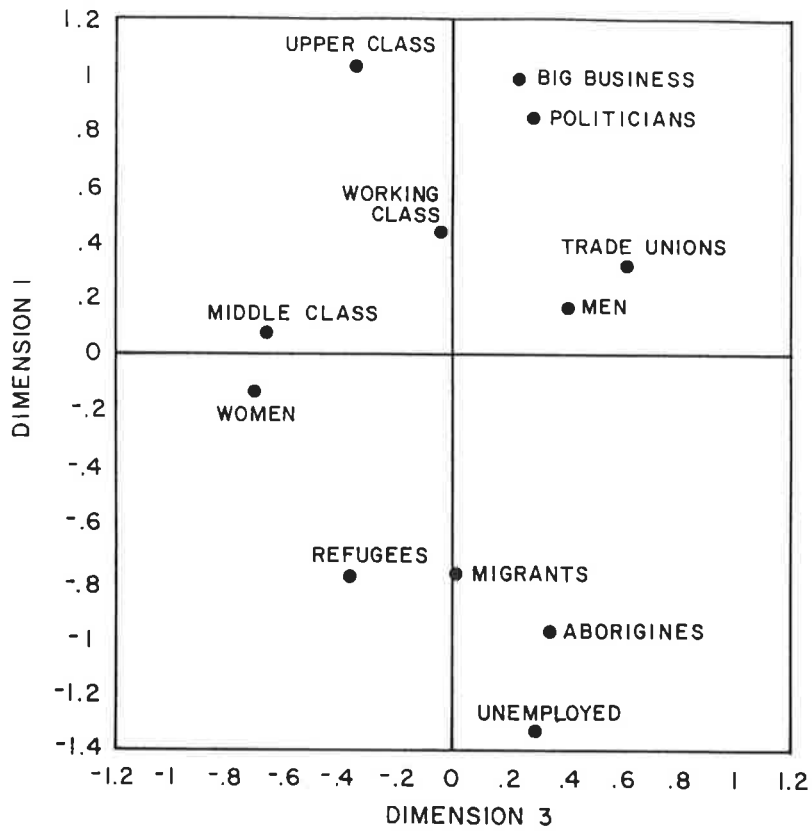
FIGURE 4.5 : Year 9, School A, Dimensions 1&3 of Minissa Solution
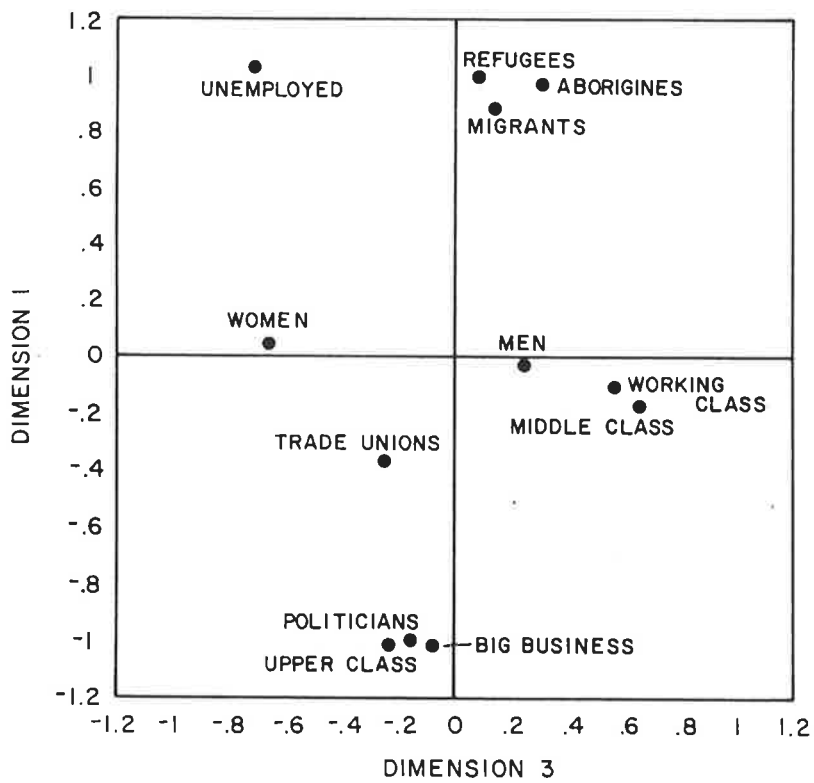
FIGURE 4.6 : Year 9, School B, Dimensions 1&3 of Minissa Solution

The fourth column for each school in Table 4.2 indicates that both schools obtain significant multiple correlation coefficients for the following attributes: active, wise, independent, rich, powerful, successful, strive to do well, competitive and educated. All these attributes have high regression weights on dimension 1. The first dimension, then, clearly differentiates between social groups on the basis of wealth, power and success. Unfortunately, the second dimension in the MINISSA solution is difficult to interpret, since there are no attributes with both a significant multiple correlation coefficient and a large regression weight on dimension 2. For School B, the attributes vote for Labor and excitable have high collinearity with dimension 2, but the fit between these vectors and the solution is not significantly strong. It is possible that students were using attributes not included in the analysis but, even intuitively, it is difficult to define this dimension. A third dimension (Figures 4.5 & 4.6) appears to be a sensitive-insensitive dimension for School A, (R = 0.87, regression weight =-0.78) and a hard-soft dimension for School B (R = 0.78, regression weight = 0.76). Both schools separate women from men on this dimension, but differ on which other groups are conceptualised as soft or sensitive vs hard or insensitive. School A positions women, middle class and upper class at the sensitive end of the dimension and groups such as men, aborigines, unemployed and trade unions at the insensitive end. School B, on the other hand, perceives women and the unemployed as soft and men and working class as hard.

Year 12 Samples

Table 4.3 presents the stress values associated with each dimensionality for the two year 12 samples. As with the year 9 students, 3 dimensional MINISSA solutions appear optimal for both year 12 samples. For School A, dimension 1 accounts for 58.94% of the variance, dimension 2 = 25.2% and dimension 3 = 15.86%. For School B, dimension 1 accounts for 58.78% of the variance, dimension 2 = 21.58% and dimension 3 = 19.63%.

Table 4.3: Stress values for Year 12 samples.

Dimensions

	1	2	3	4	5
School A	0.207	0.112	0.070	0.032	0.017
School B	0.274	0.156	0.083	0.050	0.023

The representation of the groups by older students from School A in Figure 4.7 is very similar to that of the younger respondents with the three major divisions of the groups. The exception seems to be the category trade unions, which is positioned at the upper end of dimension 1 along with upper class, big business and politicians. The separation of 'outgroups' from 'ingroups' is again evident. School B, on the other hand, (Figure 4.8) does not separate the groups so sharply into the three major divisions, but is beginning to scale the groups linearly along dimension 1. Most notable is the positioning of working class further down and migrants further up dimension 1. This appears to indicate the beginnings of a scaling of the groups along more strict socioeconomic or social class lines. The HICLUS solution for School A (Figure 4.9) clusters the groups in the same way the MINISSA solution does. The HICLUS solution for School B (Figure 4.10), however, is very different from the MINISSA solution. The discrepancy seems to suggest that the MINISSA analysis represents more accurately the nature of this sample's cognitive structuring of the groups. Students from School B do not perceive these groups as discrete types or categories that can be clustered together, but as varying gradually along linear dimensions.

Table 4.4 indicates that, despite the difference in the structuring of the groups, both schools use the following attributes to define the first dimension: wise, independent, rich, powerful, successful, competitive and educated. These are the same attributes which defined dimension 1 for the year 9 samples, and, again, can be labelled a success/wealth/power dimension. Similarly, as with the younger samples, the second dimension is difficult to
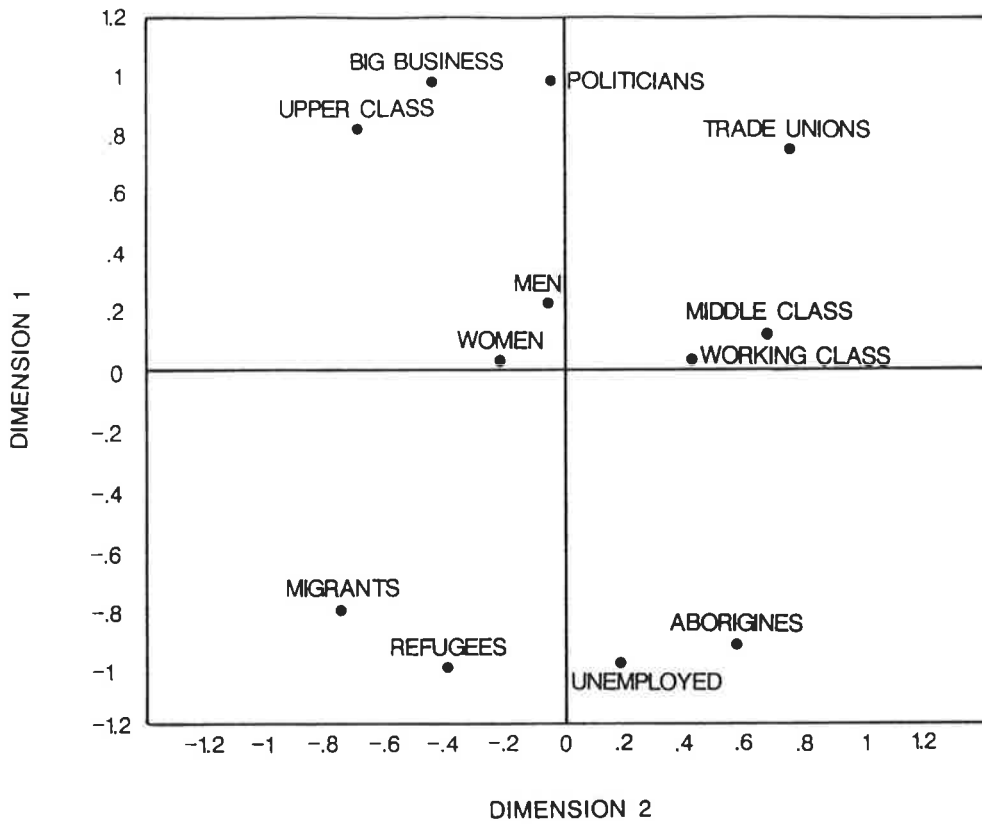
FIGURE 4.7 : Year 12, School A, Minissa Solution, Dimensions 1&2
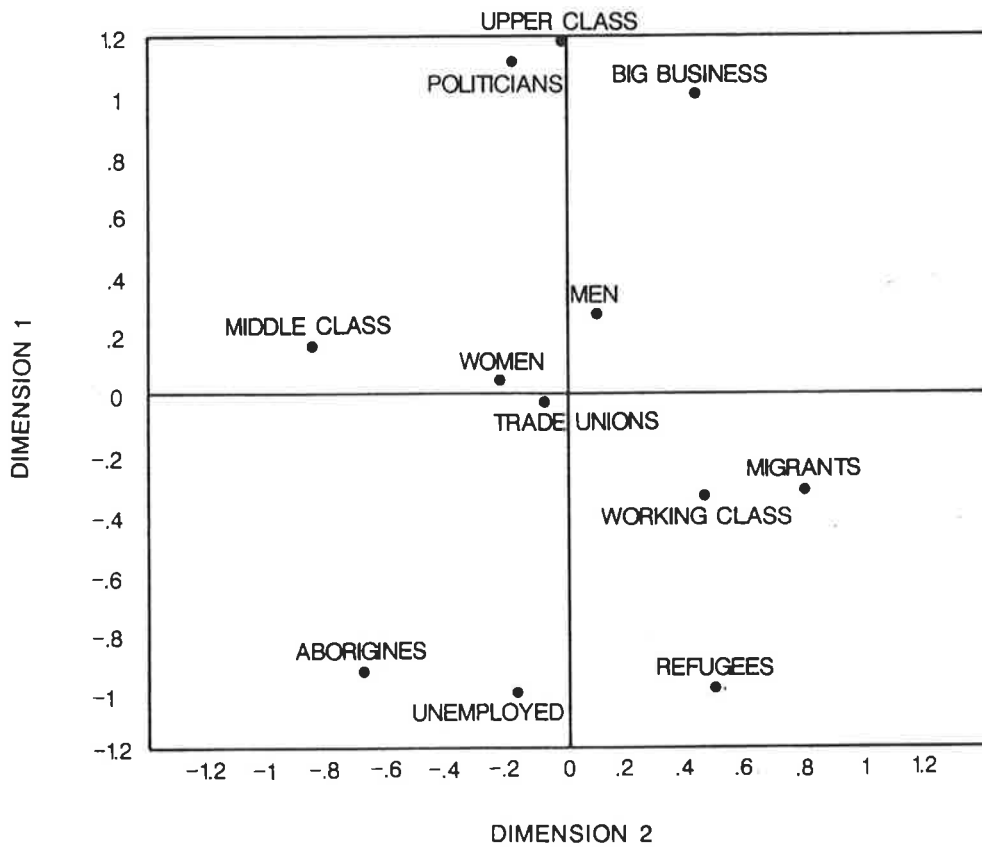
FIGURE 4.8 : Year 12, School B, Minissa Solution, Dimensions 1&2
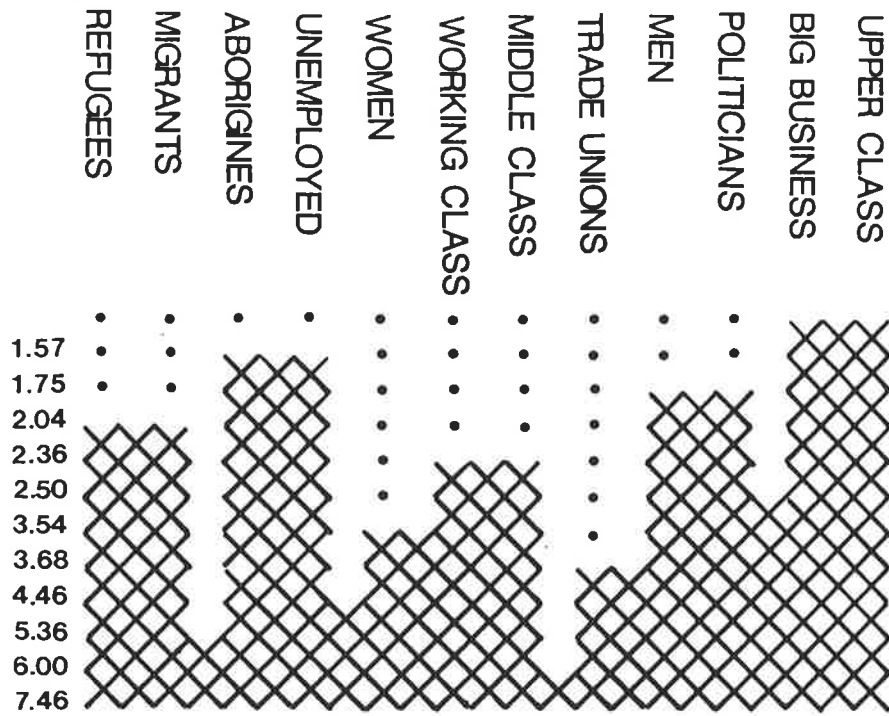
FIGURE 4.9 : Year 12, School A, Hiclus Solution
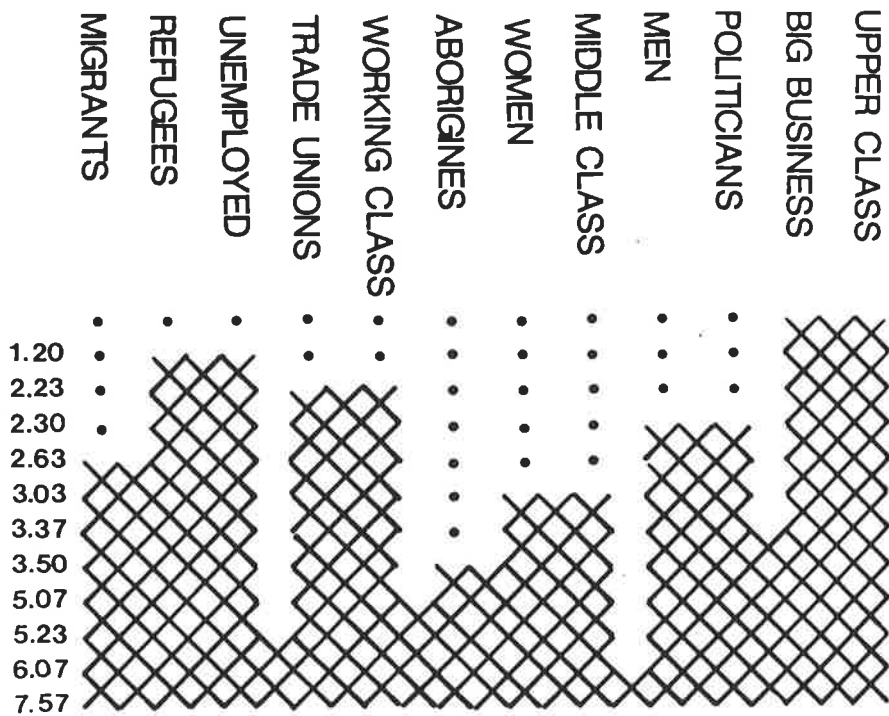
FIGURE 4.10 : Year 12, School B, Hiclus Solution

Table 4.4: PREFMAP (attribute-fitting) solution for year 12 samples.

| | School A | | | | School B | | | |
| | Direction Cosines | | | | | | | |
Vectors	1	2	3	R	1	2	3	R
active	0.92	0.27	-0.28	0.88**	0.51	0.44	-0.74	0.91**
wise	0.77	-0.12	-0.63	0.84*	0.99	0.05	0.14	0.87**
independent	0.78	-0.05	-0.63	0.90**	0.85	0.07	-0.53	0.79*
rich	0.96	-0.50	0.06	0.99**	0.99	0.14	0.06	0.99**
powerful	0.95	0.08	0.31	0.97**	0.92	-0.03	-0.39	0.95**
successful	0.86	-0.29	-0.41	0.98**	0.96	0.26	-0.07	0.96**
respect authority	0.35	-0.19	-0.91	0.79*	0.36	0.29	0.89	0.64
interesting	-0.02	0.57	-0.82	0.72	-0.12	-0.88	0.46	0.56
work hard	0.33	0.07	-0.94	0.75	0.75	0.65	0.08	0.73
strive to do well	0.59	-0.21	-0.78	0.88**	0.72	0.54	0.43	0.72
sensitive	-0.19	-0.05	-0.98	0.68	-0.26	-0.22	0.94	0.75
competitive	0.83	-0.02	0.55	0.95**	0.75	0.61	-0.25	0.88**
hard	0.36	0.36	0.86	0.85*	0.39	0.33	-0.86	0.83*
vote for Labor	0.11	0.83	-0.55	0.68	-0.58	0.14	-0.80	0.96**
excitable	0.39	0.79	-0.47	0.73	-0.08	-0.95	0.32	0.25
friendly	-0.01	0.26	-0.97	0.66	-0.18	-0.48	0.86	0.72
educated	0.92	-0.33	-0.19	0.95**	0.96	-0.17	0.21	0.97**

*p < 0.05   **p < 0.01
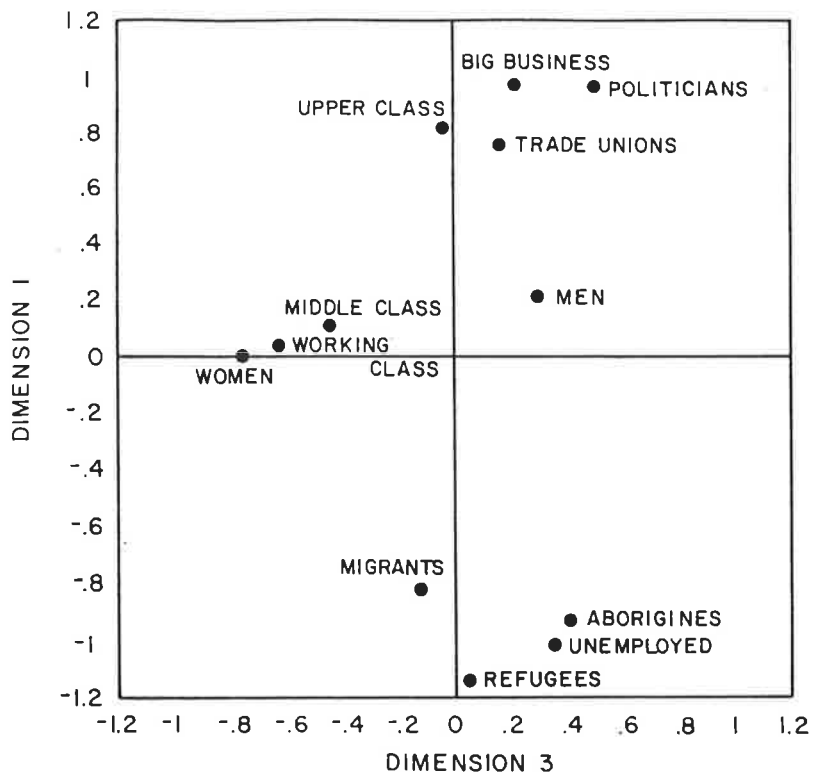
FIGURE 4.11 : Year 12, School A, Dimensions 1&3 of Minissa Solution
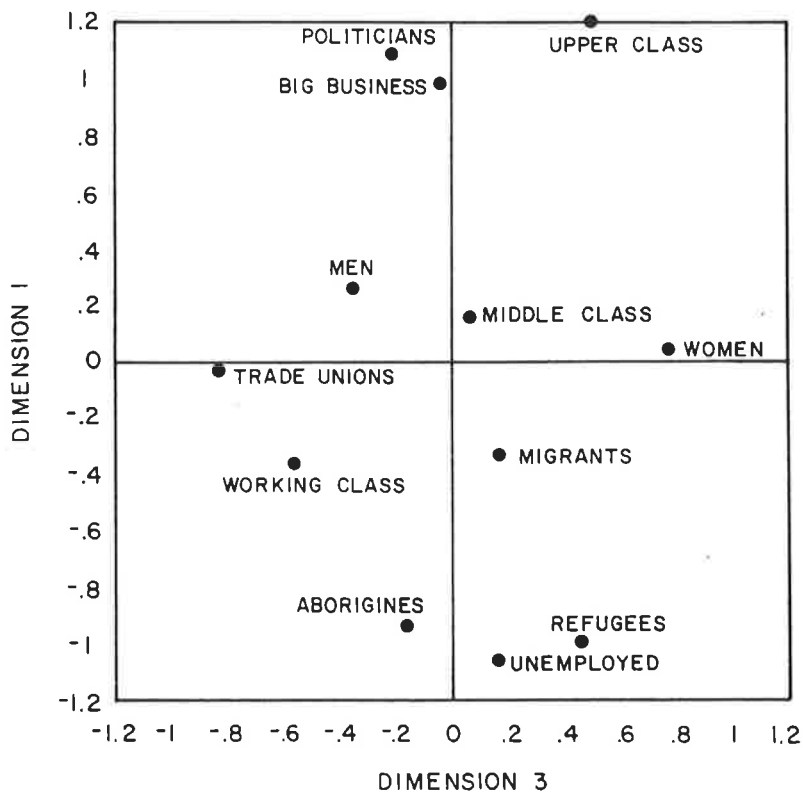
FIGURE 4.12 : Year 12, School B, Dimensions 1&3 of Minissa Solution

interpret since no attribute vector relates significantly to the co-ordinates of this dimension. For School A, the third dimension (Figure 4.11) seems to be a hard-soft (R = 0.85) one, with the attributes respect authority (R = 0.79) and strive to do well (R = 0.88) adding to this dimension. Women, working class, and middle class are positioned at the soft, respect authority and strive to do well end of the dimension, with aborigines, politicians, unemployed and men at the other end. For School B, the third dimension (Figure 4.12) also distinguishes between groups on a hard-soft dimension (R = 0.83). The scales vote for Labor-vote for Liberal (R = 0.96) and active-passive (R = 0.91) also load heavily on dimension 3 for School B. Trade unions, working-class and men are characterised as being hard, active and voting for the Labor party, while groups such as upper class, women and refugees are characterised as soft, passive and vote for the Liberal party.

Adult Sample (Third Year Psychology Students)

The linear scaling of the groups along a socioeconomic dimension obtained from the year 12 students from School B becomes even more evident in the adult sample. The 2-dimensional solution presented in Figure 4.13, with an associated stress value of 0.151 (Table 4.5), shows this clearly [3]. The groups decrease in wealth and socioeconomic status as one moves down dimension 1. This dimension accounts for 72.44% of the variance, while dimension 2 accounts for 27.56% of the variance. Again, this is very similar to the configuration obtained in the pilot study for the adult sample. Furthermore, dimension 2 appears to approximate the male-female or hard-soft dimension obtained in the pilot study. The positioning of women and men along dimension 2 again suggests a general linear scaling of groups along a male-female dimension, with groups such as working class, trade unions and big business being associated with men, and middle class, aborigines and unemployed being associated with women.
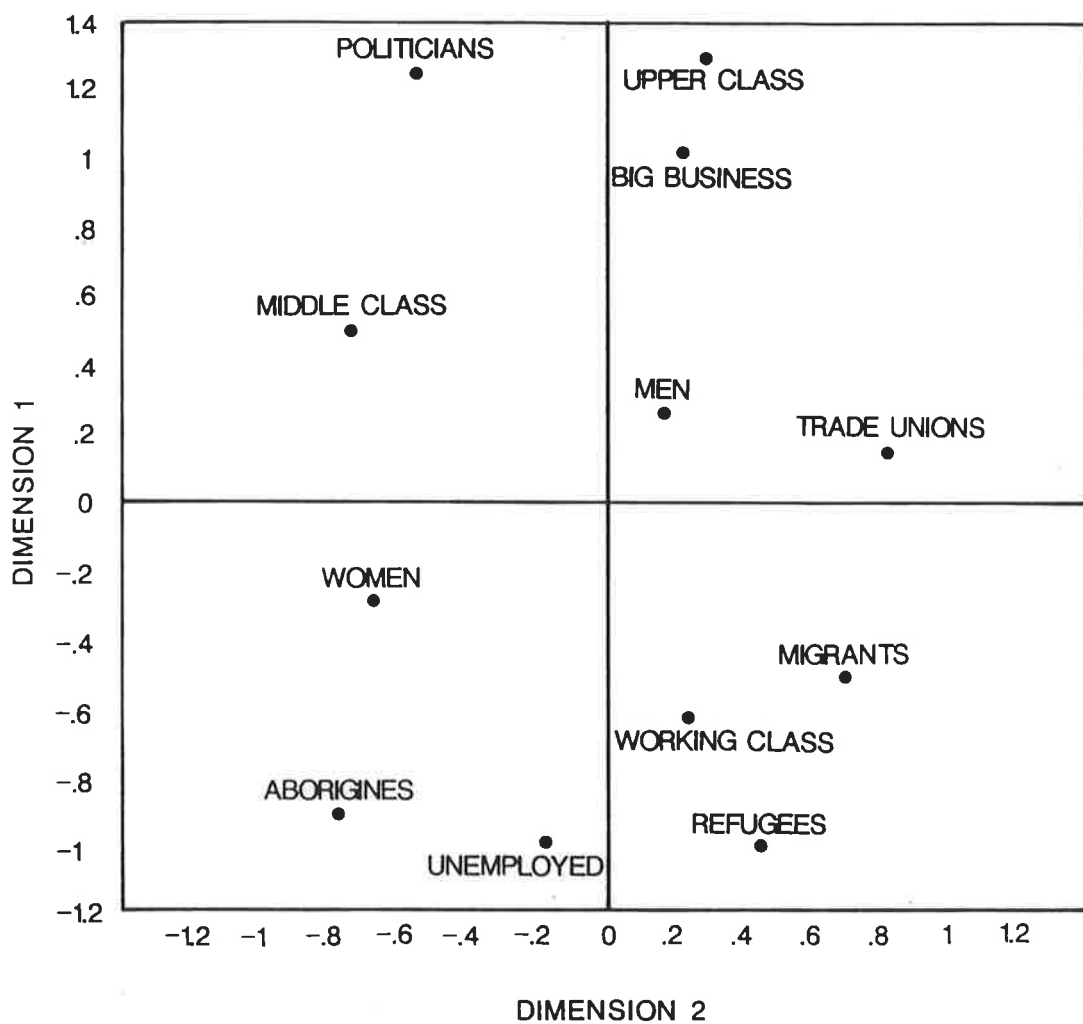
FIGURE 4.13 : Adult Minissa Solution, Dimensions 1&2
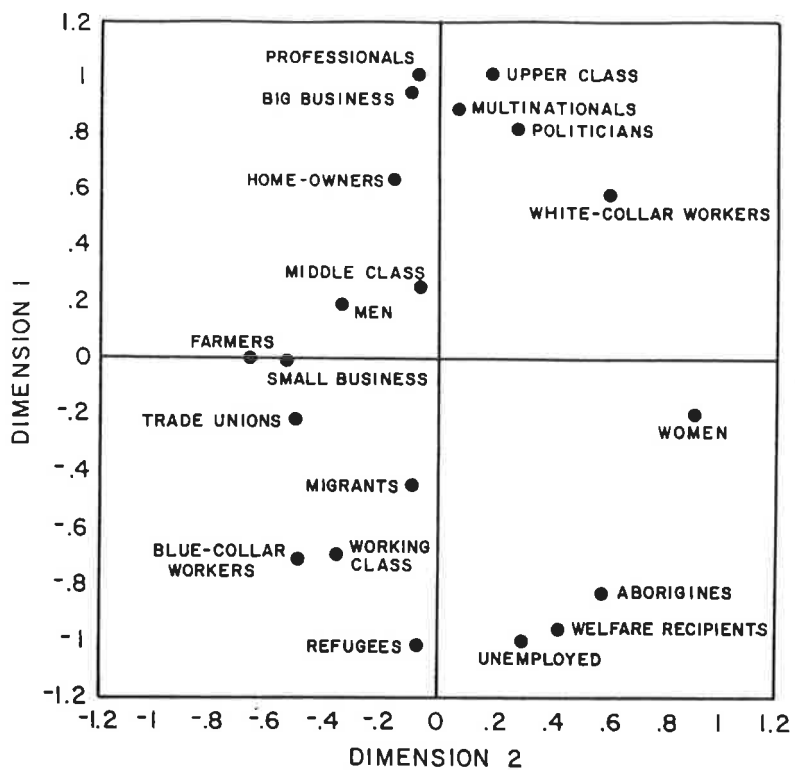
FIGURE 4.14 : Adult Minissa Solution, Dimensions 1&2 for 20 Stimulus Groups
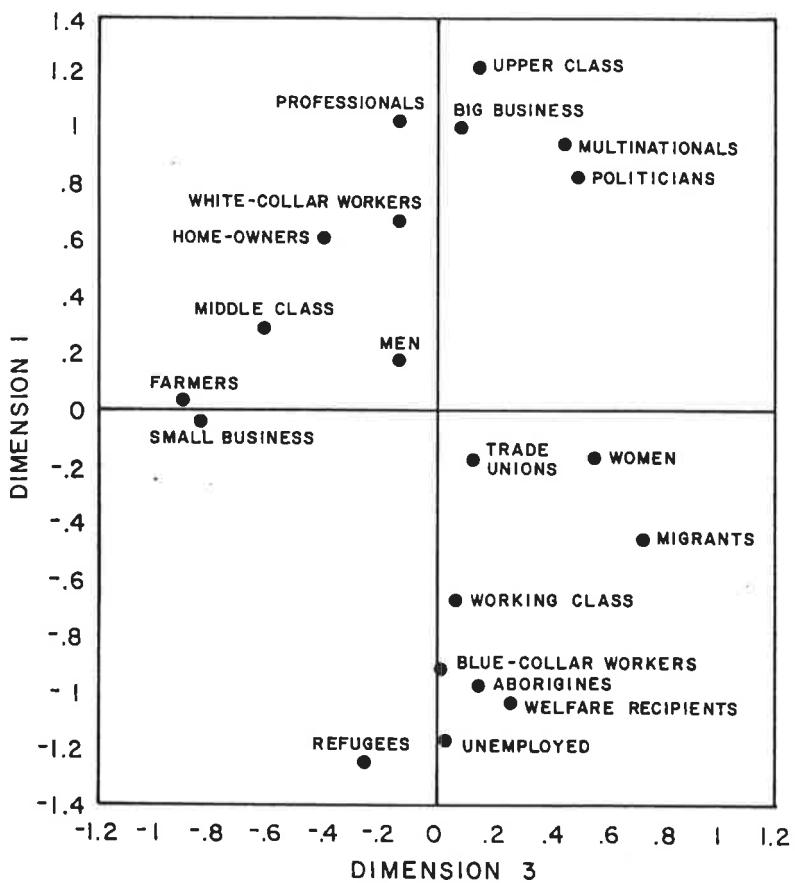
FIGURE 4.15 : Adult Minissa Solution, Dimensions 1&3 for 20 Stimulus Groups

Table 4.5: Stress values for ADULT solutions: 12 & 20 stimuli set.

Groups	Dimensions				
	1	2	3	4	5
12	0.260	0.150	0.081	0.045	0.029
20	0.250	0.166	0.108	0.069	0.053

The stress values in 1 to 5 dimensions associated with the expanded 20 stimuli set for the adult sample are also presented in Table 4.5. A 3-dimensional solution seems optimal with its associated stress value of 0.108. Figure 4.14 presents the solution in the first 2 dimensions, dimension 1 accounting for 58.52% of the variance, and dimension 2 for 17.46%. Again, even with the extra groups, a very clear socioeconomic dimension is evident in dimension 1. As in the previous MINISSA solution for 12 groups, the category of men is positioned at one end of dimension 2 and women at the other end, the former being associated with groups traditionally perceived as 'masculine' such as farmers, blue collar workers and trade unions, and the latter being linked with groups such as welfare recipients, white collar workers and aborigines. Figure 4.15 plots dimensions 1 and 3. Groups on the left-hand side of the space, such as farmers, small business, middle class and home owners, are separated from the other groups. These are the same groups which continued to be represented by the media as experiencing uncharacteristic financial problems during 1987. However, unlike the third dimension for the 20 stimulus groups found in the pilot research, these groups were not associated with those regarded traditionally as disadvantaged.

Gender Differences in Dimension Salience.

As in the pilot study, the adult sample contains a greater proportion of women, which may account for the emergence of a masculine/feminine categorisation of the groups on the second dimension. An analysis of angular variation was performed on the two dimensional

weights for the adult sample which yielded a significant gender difference in weights (F = 12.5, df = 1, 39, p < .01: see Table 4.6 below)[4].

Table 4.6: ANAVA table for two dimensional weights, adult sample.

Source	SS	DF	MS	F
Between Groups	1.00	2	0.50	12.5
Within Groups	1.56	39	0.04	
Total	2.56	41		

An INDSCAL analysis was also performed on the averaged male and female data matrices, using the previously derived overall MINISSA solution as a fixed configuration. This analysis yielded substantially different weights for males and females on the second dimension (males = 0.18; females = 0.26) and a relatively small difference on dimension 1 (males = 0.84; females = 0.81). Similar INDSCAL analyses were performed on the other samples to check for possible gender differences in dimension weights. This seemed particularly relevant for the third dimension which emerged for each of the samples, which appeared to correspond to a male-female division of the social groups. These weights are detailed in Table 4.6. As can be seen from the table, there are relatively small gender differences on the third dimension. The largest gender difference in weights is for the year 9 sample from School A on dimension 1. Males attribute a significantly greater salience to the socioeconomic dimension than do females in this sample.

Table 4.7: INDSCAL Gender Weights for Dimensions 1, 2 & 3, Years 9 & 12.

Dimensions	1		2		3	
Sex	M	F	M	F	M	F
Samples						
Year 9						
School A	.90	.77	.21	.30	.19	.19
School B	.89	.85	.17	.14	.14	.16
Year 12						
School A	.83	.84	.32	.27	.24	.27
School B	.83	.80	.29	.29	.24	.24

Increased Consensus With Age:

To obtain subject weights and compare individual variations in dimensional salience, the MINISSA solutions were subjected to an INDSCAL analysis using the 'fix points' procedure (Coxon et al, 1981). Figures 4.16 and 4.17 present the normalised subject spaces in the first two dimensions for the year 9 samples.

While no subject from School A accords dimension 2 with more salience than dimension 1, several subjects accord both dimensions with relatively equal importance. Subject weights on dimension 1 range from .205 to .789; for dimension 2 they range from .074 to .399. For School B, dimension 1 weights range from .057 to .811 and dimension 2 weights from .043 to .346. Only one subject (subject 26) accords dimension 2 with more salience than dimension 1. Again, for a number of subjects, both dimensions are of relatively equal importance (actual subject weights presented in Appendix B6).

Figures 4.18 and 4.19 present the normalised subject spaces in the first two dimensions for the year 12 samples. For School A, subject weights for dimension 1 range from 0.39 to 0.73 and for dimension 2, 0.06 to 0.48. As can be seen, no subject accords dimension 2 with more salience than dimension 1. For School B, dimension 1 weights range from
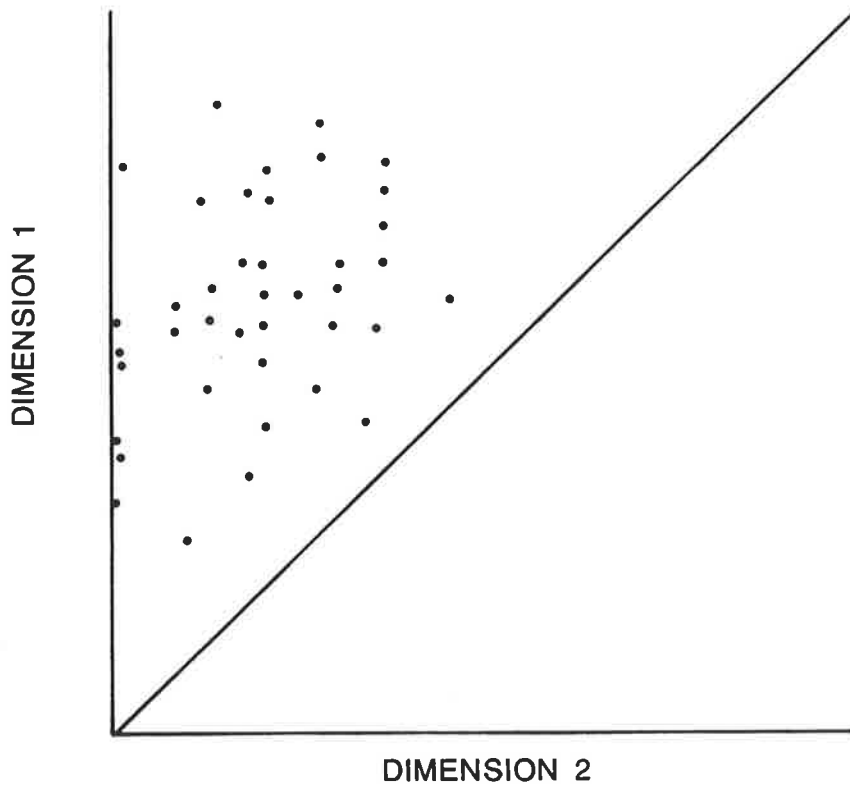
FIGURE 4.16 : Year 9, School A, Subject Space
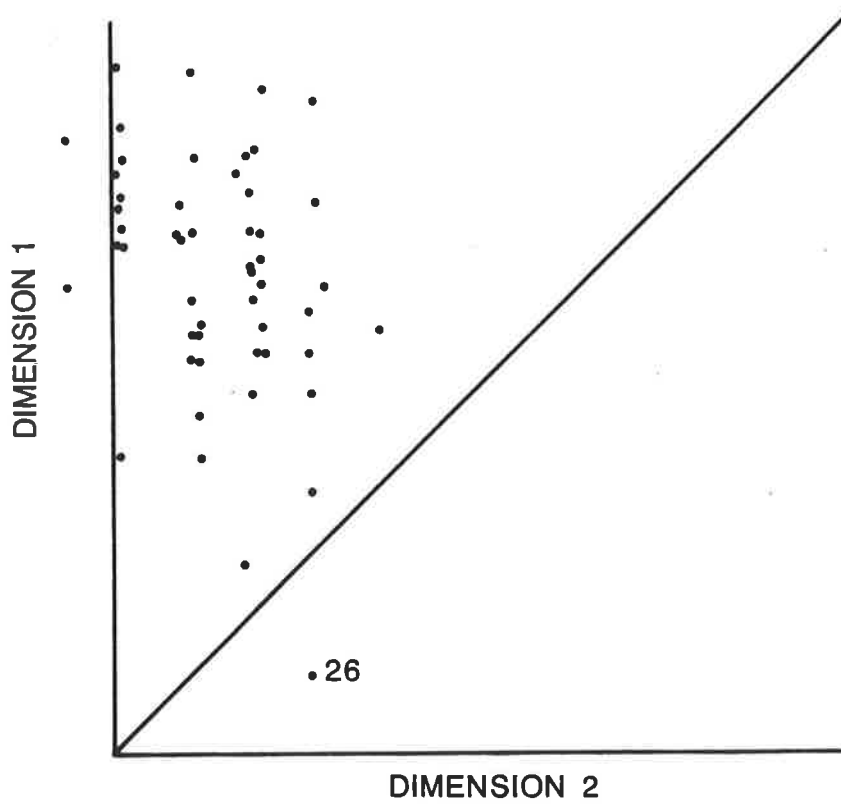
FIGURE 4.17 : Year 9, School B, Subject Space
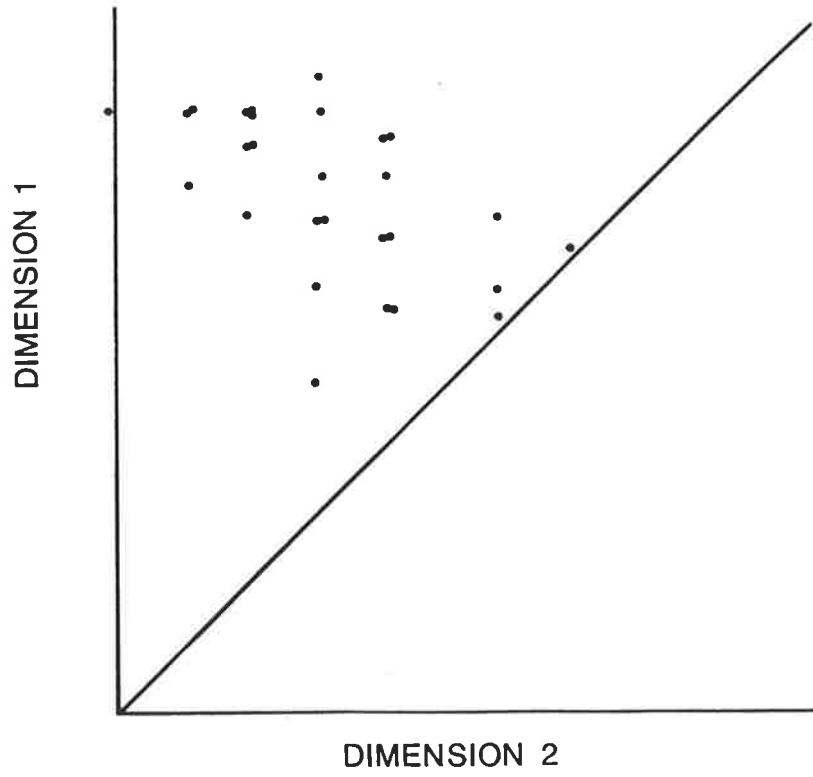
FIGURE 4.18 : Year 12, School A, Subject Space
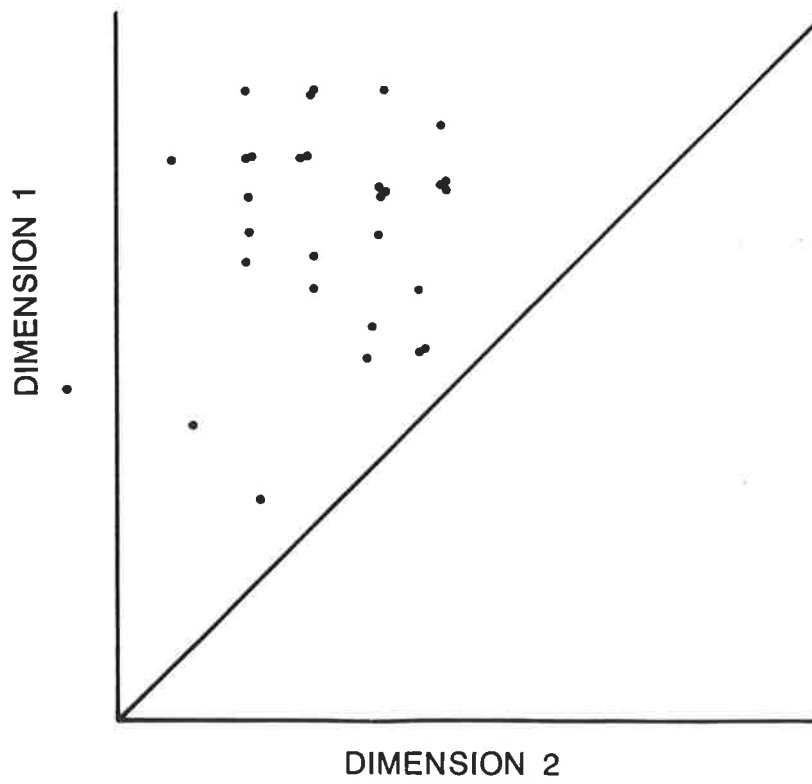
FIGURE 4.19 : Year 12, School B, Subject Space

0.26 to 0.75 and dimension 2 weights range from 0.02 to 0.40. Again, all subjects weight dimension 1 more heavily than dimension 2 (see Appendix B6 for subject weights).

To obtain subject weights for the adult sample, an INDSCAL analysis was performed on the 2-dimensional solution obtained with the 12 stimuli set. Subject weights for dimension 1 were relatively large for all adult subjects, ranging from .335 to .848 (see Appendix B6 for subject weights) . The Subject space is presented in Figure 4.20. It is evident that no one in this sample accorded dimension 2 with more salience than dimension 1. Figure 4.21 presents the adult subject space for the 20 stimuli solution.

Comparing the subject spaces (Figures 4.16, 4.17, 4.18, 4.19 & 4.20) for the different samples indicates that most respondents, regardless of age (except for one subject in year 9, School B) accorded dimension 1 (the socioeconomic dimension) with more salience/importance than dimension 2. Several subjects in all samples accorded both dimensions with approximately equal salience. A closer examination of the actual subject weights, which are presented in Appendix B6, reveals an increase in the salience ascribed to dimension 1 with increased age. If we determine the percentage of subjects from each sample who obtained subject weights greater than or equal to .6 - a relatively large weight indicating a significant amount of the variance was accounted for by dimension 1 in that subject's personal representation of the groups - we obtain the following results: Year 9 subjects, School A = 26.09%, School B = 47.17%; Year 12 subjects, School A = 53.57%, School B = 56.67%; Adult subjects = 60.98%.

Thus, with increased age, the socioeconomic dimension becomes more important in the structuring of the groups, suggesting an increase in the consensual representation of the categories. As with the pilot samples, the standard deviations of each comparison (66) were compared across the three age groups to see whether there was a decrease in variance with increased age. The standard deviations were rank-ordered for decreasing variance. The ranked standard deviations for each age group are presented in Appendix B7. Of the comparisons, 63.6% had standard deviations which decreased consistently with increased age. A Friedman's two-way analysis of variance by ranks indicated that the mean ranks of the
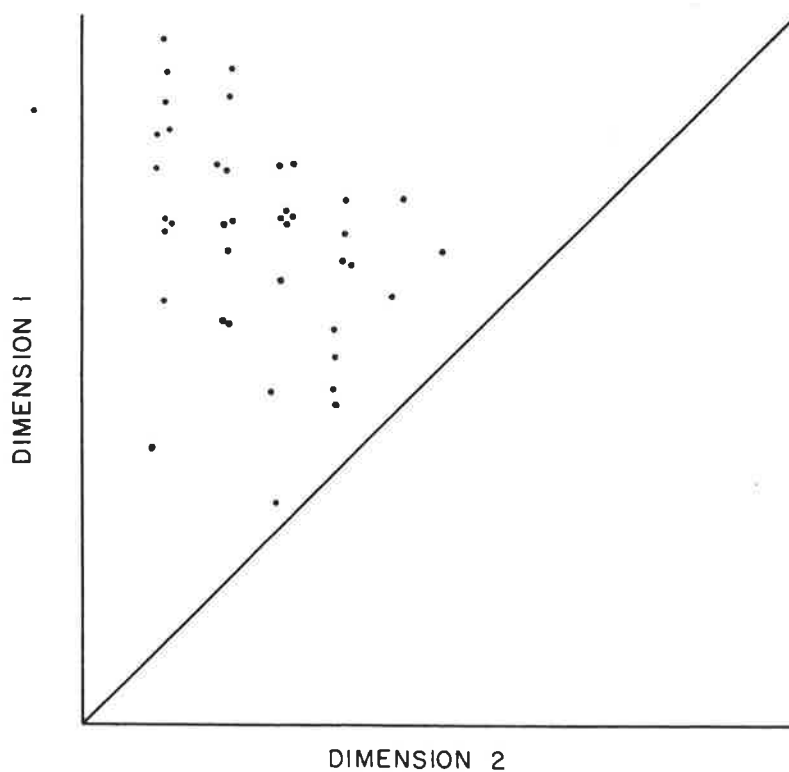
FIGURE 4.20 : Adult Subject Space, Dimensions 1&2 for
12 Stimulus Groups
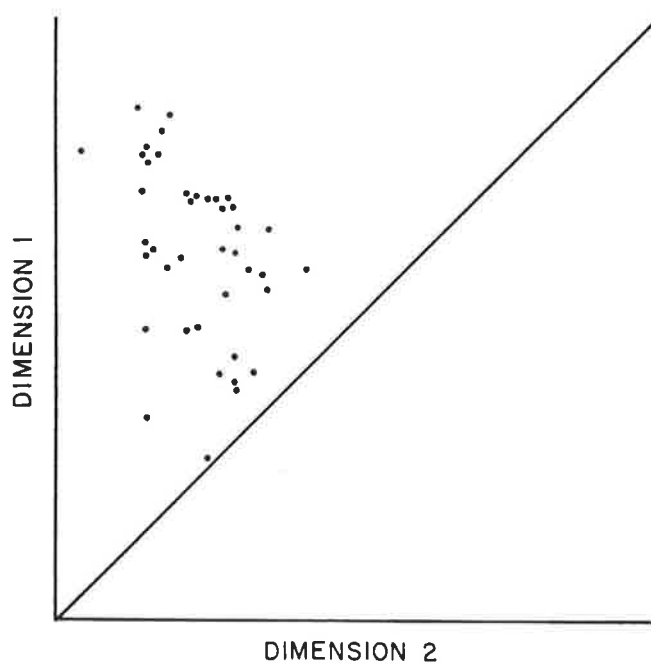
FIGURE 4.21 : Adult Subject Space, Dimensions 1&2 for
20 Stimulus Groups

standard deviations differed significantly (Xr^2 = 85.01, df = 2, p <.001) between the three age groups. Subsequent multiple comparisons between the three age groups (Siegal & Castellan, 1988) can determine which of the groups differ significantly from the others. The difference between the sum of ranks between each of the groups at the .05 level of significance needed to be of the magnitude of 27.50 or more. All three comparisons exceeded this critical difference (see Appendix B7), indicating a significant difference in the standard deviations between the three age groups in the predicted direction.

The G statistic, a test of dispersion (Thorngate, 1974) was also applied to the frequency of responses obtained for each of the 66 comparisons made by the three age groups. The G statistic is calculated on the basis of natural logarithms of frequencies, and its sampling distribution approximates the sampling distribution of X^2 with (r-1)(c-1) degrees of freedom. Once it can be determined that there are differences between sample frequencies, an index of dispersion can be calculated to indicate whether dispersion decreased over the three age groups (see Thorngate, 1974). Since the G statistic approximates the sampling distribution of the X^2 statistic, one of its requirements is that cell frequencies should be equal to or greater than 10. Since several of the 66 comparisons had cells which did not meet this requirement, the frequency table was collapsed from a 3 (age groups) x 9 (response categories) table, to a 3 x 3 table. Response categories 0, 1 and 2 were collapsed to form category 1; 3, 4 and 5 were collapsed to form category 2; and 6, 7 and 8 were collapsed to form category 3. Even after collapsing categories, not all cells met this frequency requirement.The net effect of collapsing the response categories is to decrease the magnitude of the difference in dispersion that actually exists between the age groups. As a result, the G statistic is rather a conservative index of dispersion in this instance. Of the 66 judged comparisons, 38 (58%) yielded a significant G statistic at at least the .05 level of significance (df = 4), indicating a significant difference in the frequency of responses between the age groups. Of these, 26 comparisons (68%) showed a decrease in dispersion with increased age. A further 16 comparisons showed a decrease in dispersion with age, but had Gs that did not reach statistical significance.

Discussion:

Generally, the present research replicates the major findings of the pilot study, but with one important qualification. While further evidence supports the increased consensual nature of the representation with age, the change in the organisational structure of the representation with age seems to be limited to the middle class students alone. This difference will be dealt with in some detail in the present discussion.

As with the pilot research, the resultant MINISSA and HICLUS configurations for all three age groups and the PREFMAP results from the first two age groups indicate that wealth, power, status and success were the major attributes on which the 12 stimulus groups were being compared. Thus there was considerable consensus with respect to the attributes which were primarily used by all age groups to judge and evaluate the social categories. More importantly, as with the pilot study, this trend towards consensus increased with age.

Whether the groups were represented linearly along dimensions or grouped in clusters, all representations reflected a general hierarchical socioeconomic separation of groups. This was also true of the solutions yielded in the pilot research. A study by Walker (1976), in the mainstream schema tradition, found that subjects instructed to learn an asymmetrical vertical structure learned the structure significantly better than subjects asked to learn a symmetrical (horizontal) one. This study and the present one suggest that a linear or hierarchical schema of the social structure is culturally learned through socialisation and experience. Furthermore, Walker (1976) found an 'upward tuning' cognitive effect where top positions were learned faster than middle and lower positions, and an 'end anchoring' effect where fewer errors were made in the learning of extreme positions (top and bottom). These findings are also consistent with the results of the present study. In all the resultant MINISSA solutions, groups in the top end of the social hierarchy, such as big business, politicians and upper class, were clustered very closely together by all the samples, suggesting a clear recognition of the nature of these groups. Groups positioned at the bottom end of the vertical structure were not as tightly clustered but more loosely positioned together. This was even more the case for groups in the middle of the hierarchy. Simek & Iverson (cited in Walker, 1976)

suggest that upward tuning, the more effective learning of status positions higher up the social hierarchy, is rewarded in our culture since it increases knowledge of social norms which are regulated by persons occupying these top end positions.

While this study and the pilot research has shown the development of consensual knowledge structures, as Billig (1988) has pointed out, the existence of consensus may not in itself indicate the existence of a social representation. Certainly, the present research shows how people anchor or contextualise social information within an existing structural framework. What the present study does not show clearly is whether this structural representation is objectified. There is some cloudiness regarding whether the defining characteristics of a social representation, in Moscovici's sense, are that the representation is not only shared by a collectivity but is also an objectified cognitive structure. The present author believes that a vertical hierarchical schema of the social structure is indeed objectified, in the sense that, while it certainly reflects a pervasive reality, it is also a powerful organising principle with a life force of its own (Moscovici, 1982). Think of the way in which this hierarchical organisation is reflected in our everyday social relations, and the extent to which we draw on socially shared 'economic contents' to organise and structure information, even in non-economic contexts (Moscovici, 1988). In Abric's (1984) terms, it is clear that the socioeconomic dimension of the social structure forms the stable core of the representation, around which other elements are organised.

Consistent with the hypothesis generated by social representations theory is the notable difference in the representations between the two year 12 samples. The year 12 subjects from School B who come from higher socioeconomic backgrounds than their counterparts from School A, have begun to use the same linear representation of the groups as do the adult sample. One of the major differences in the structuring of the groups between the two samples is the positioning of the stimulus category 'working class'. School A, which is essentially representative of this social category, positions this group in the centre of the configuration very closely alongside 'middle class', whereas School B positions this group much further away from 'middle class' and closer to the bottom of the vertical schema. While

the students from School A objectively come from the lower end of the socioeconomic spectrum, they do not perceive social similarities between the category 'working class' and groups such as migrants, refugees, aborigines and the unemployed. Indeed, they prefer to distance the category 'working class' from these groups and to position it close to middle class.

This finding shows similarities with the results of Emler and his co-workers (Emler & Dickinson, 1985, Emler, Ohana & Dickinson, 1989) who found that working class children did not perceive income differentials to be as large between occupations as did middle class children. Similarly, the present finding suggests that middle class adolescents perceive greater economic inequalities between the social classes than do working class adolescents. These are curious findings, since sociologists have assumed that one's placement further down the social hierarchy would necessarily be associated with an enhanced perception of the existence of inequalities in society. Even so, empirical sociological studies confirm that disadvantaged groups do not necessarily perceive their society as being particularly unequal (Bell & Robinson, 1980; Robinson, 1983) and, in a recent Australian study of unemployed young adults, it was found that this economically disadvantaged group perceived only small amounts of ethnic and class inequality in Australia (Marjoribanks, Secombe & Smolicz, 1985).

Within cognitive-developmental psychology, such class differences in social perception have often been interpreted within a cognitive stage developmental model, which has argued that middle class children develop concepts at a faster rate of development. For example, while studies show that with increased age most children embrace the economic principle of equity rather than equality (Stacey, 1982), studies which look specifically at social class differences in distributive justice find that middle class children endorse this principle more strongly and develop more sophisticated explanations to legitimate its application (Enright, Enright, Manheim & Harris, 1980, Emler & Dickinson, 1985). Cognitive developmental theorists view this as a reflection of these children's greater cognitive capacities to understand a complex but logical concept. Within this perspective, it is assumed that the equity principle

is the most just, natural and psychologically preferred state. Sampson (1975), amongst others, has argued that there is nothing inherently just or logical about the principle of equity; it is a value and belief system which is socially and culturally determined and disseminated: a value system which ultimately supports and legitimates the existence of social inequalities. Middle class children's greater endorsement and application of this principle may not reflect their cognitive capacity to understand the notion of equity. Rather, it may simply reflect their greater familiarity with and acceptance of a value which pervades their social milieu. A similar social experiential explanation is offered by Emler & Dickinson (1985) to account for class differences in the development of social knowledge. They suggest that, like material resources, social knowledge is also unequally distributed within society,

> ". . . social representations of economic inequalities are more detailed, extensive and salient in the middle class. Hence children who are members of that class assimilate these representations more rapidly and thoroughly. The same representations are more 'external' to the working class milieu and so children in this class have acquired more simplified and tenuously held versions" (p. 197).

Consistent with the social experiential explanation cited above, this class difference can also be explained within an intergroup relations or social identity perspective. Of course, while the data refer only to the 'objective' socioeconomic status of the samples and not to their 'subjective' social identifications, conclusions must necessarily be limited. It is likely, however, that, through School A's identification with the category 'working class' and its perceived similarity with the category 'middle class', the social distance between the former and the bottom four categories is maintained in order to preserve a positive group identity (Tajfel, 1978b) . Students from School B do not identify with the category 'working class' and position it closer to the bottom end of the social hierarchy. Since social categorisation was a salient feature of the multi-dimensional scaling exercise, it is not surprising that some 'ingroup' favouritism operated. Tajfel and his colleagues (1971) have found that social categorisation itself can lead to ingroup favouritism and outgroup discrimination. It is indeed plausible that School A's representation of the groups was motivated by a need to maintain a positive social identity by either (a) denying socioeconomic differences between the

categories middle class and working class, or perceiving the category boundaries to be more permeable than did students from School B, or (b) rejecting the status similarities between working class and other disadvantaged groups by using evaluative dimensions of comparison that increase the social distance between them. For example, it is possible that students from School A differentiated the category working class from other disadvantaged groups on the basis that groups such as migrants, refugees, aborigines and the unemployed are minority groups, whereas working class refers to a sizeable 'majority' of people.

Since the student adult sample was predominantly middle-class in background, it would be worthwhile investigating whether such a class difference in the representation of the groups exists in adulthood. If this were found to be the case, then it would suggest category differences in the schematic representation of social groups within society. A much larger and more representative sample of the adult population would solve this problem. As a preliminary step towards this end, a separate MINISSA analysis was run for adult subjects who identified with the category 'working class'. Before beginning the multidimensional scaling exercise, adult subjects were asked to indicate with which of the social groups they identified. Only five subjects identified with the category working class; 32 identified with middle class, one with upper class and three subjects did not identify with any of the class categories. The 2-dimensional MINISSA solution for the five subjects who identified with working class was essentially the same as the 2-dimensional MINISSA solution for the entire adult sample. The socioeconomic linear scaling of the groups is also clearly evident for these five subjects, with a substantial distance separating working class from middle class.

However, this is by no means a definitive check on adult class differences in the cognitive structuring of the groups. Indeed, the discrepancy between objective class status and subjective class identification has been a recurrent finding in the sociological literature. The subjective identifications with the middle classes has been said to contribute to a so-called lack of class consciousness amongst the working class, and thus to the failure to realise their true political and economic interests. Indeed, recent Australian research in class consciousness (Chamberlain, 1983) found that most respondents identified three major

classes in Australian society (upper, middle and lower) and tended to locate themselves in the middle class. Furthermore, most of the respondents who were objectively categorised as working class identified themselves as middle class. Chamberlain points out that in interviews people tended to use the term middle class interchangeably with working class, and terms such as 'average people' or 'ordinary people'. As Tajfel & Turner (1979) have argued, the essential element in intergroup relations is subjective identification with a group. Since we have only limited information regarding the students' identifications with the social categories used in the multidimensional scaling exercise, we can only speculate what intermediary role identification with the social categories has played in the way the groups were structured. Furthermore, we do not know to what extent the students in this study perceived the relational qualities between the stimulus groups as legitimate or stable. Tajfel (1978b) has argued that these two variables are important in intergroup comparisons that individuals make, and the resultant effects it has on their social identity.

Although only a post-hoc interpretation of the scaling of the social groups along dimension 2, the emergence of a male-female dimension in the adult sample is worthy of discussion, since it also emerged in the pilot study using a similar adult sample of psychology students. It can be argued that, for the adult samples in both studies, the female 'bias' in the samples may account for the strong emergence of such a dimension, and that male adult respondents did not accord this dimension with as much salience as did the females. It is, however, noteworthy that an essentially similar third dimension emerged for the year 9 and 12 samples which yielded negligible gender differences.

The issue of a male-female dimension used to describe social categories is of some significance, given a recent finding by Eagly & Kite (1987) who argue that national stereotypes are more likely to be based on male stereotypes of a given nationality than on female stereotypes. Because men occupy positions of status and power, they participate more often in the events of a society that are made salient to foreign observers. Thus men of a given culture are more likely to be ascribed the perceived stereotypical characteristics of their culture than are women. Following this argument, it is indeed likely that stereotypes of social

categories within a culture are likely to reflect this agentic-communal distinction. Subgroups within a culture, who are salient because of their high public participation, are more likely to be equated with the male stereotype. The female or communal stereotype, on the other hand, is likely to be used as a schematic representation of subgroups with lower status and/or a lower public profile. This adds further to the notion that the male-female polarity may be a culturally dominant way of categorising (anchoring) social objects, and thereby imbuing them with meaning and familiarity.

The use of exploratory and descriptive techniques, such as multidimensional scaling, holds promise in the study of the content and structure of social representations. Di Giacomo (1980) used similar multidimensional scaling and hierarchical clustering techniques to explain the failure of a student protest movement in terms of the differing perceptions held by the leaders of the protest movement and the students. The present study was more structured than Di Giacomo's, in that the social categories for comparison were specified. This was, to some extent, a necessary requirement in order to standardise the categories to be compared across the different age and socioeconomic groups. A free-response format, where students themselves provide the salient social categories of comparison, would be more in line with the tradition of social representations research.

The question of sharedness of perceptions also presents problems of definition and measurement. When is a belief system, cognitive structure, attitude, etc., said to be shared by a collectivity? What degree of agreement is considered sufficient to classify a cognitive structure as pervasive? It has already been argued that individual variation will always exist, even within a consensual perspective. As Litton & Potter (1985) have shown, in their research on explanations given by subjects for the St Paul's street riot of 1980, there may also be varying levels of consensus. More recently, Hraba, Hagendoorn & Hagendoorn (1989) found that, while there was considerable agreement among respondents regarding the content of the ethnic hierarchy in The Netherlands, suggesting the existence of a consensual representation, the form of the hierarchy varied across domains and different contexts of use. The authors present this study as evidence that consensual representations are not necessarily

static structures, but are used in dynamic and flexible ways by different people and across different situations. This interpretation, of course, sits equally well with Moscovici's formulation and Litton and Potter's criticisms of the consensus issue.

Both the pilot and present research show that, although consensus is not complete, there is a movement towards increasing sharedness in perceptions with increased age. Importantly, unlike other studies in social representations, consensus has not been assumed but has been measured and confirmed by analyses sensitive to individual differences. This is not a remarkable finding in itself, since it has always been assumed that socialisation has this effect. What is remarkable is the dearth of studies which demonstrate this effect empirically. Rather, as Nisbett & Ross (1980) point out, most research has focused on individual differences in beliefs, attitudes and knowledge.

One study, which reported a similar trend towards increased consensus with age, is Jaspars, Van de Geer, Tajfel and Johnson's (1972) study on the development of national attitudes in Dutch children. These authors adopted a similar cross-sectional age design in their study, but used a considerably younger sample of students aged between seven and twelve. The students were asked to give preference ratings for six countries. It was found that the children's preference for their own country increased with age. Importantly, this increased preference was accompanied by increases in inter-individual agreement and consistency. The children also made paired similarity judgements between the six countries. As with the present study, the data were analysed by multidimensional scaling procedures. The results indicated that the older children's representational structure was much more differentiated and consensual than the representations yielded by the younger students' data; findings which are consistent with the results of the present study.

Of course, a cross-sectional study such as the present one can be only suggestive of a development towards consensus; longitudinal studies especially examining separate cohorts would be better equipped to explore this consensual trend more definitively. Such studies would be more able to detect possible historical and generational influences on the nature of societal representations (Himmelweit, 1990). Furthermore, longitudinal cohort studies may

reveal different patterns and degrees of consensus. Historical periods of social, political and economic unrest may produce less consensual representations of society.

Overall, what both the pilot and present research demonstrate is the possibility of integrating the schema and social representations concepts by studying the content, origins, development, organisation and use of knowledge structures from within both perspectives. There is little doubt that people use such cognitive structures to facilitate the processing of complex social information but, at the same time, these structures do not emerge and develop autonomously within each individual's head. They are grounded in the social conventions, prescriptions and experiences of a collectivity. The clear recognition of not only the cognitivist but also social functions of such structures will lead to a better understanding of how people interpret and imbue the social world with meaning. It is hoped that attempts towards bridging these presently disparate approaches will continue.

The next part of this thesis, while analytically distinct from the research reported thus far, continues to explore links between social representations theory and other mainstrean social cognition approaches. Chapters 5 and 6 will attempt to show the relevance of social representations theory to attribution theory. Theoretical connections are made between both these approaches and the search for dominant or widespread societal beliefs and values which has characterised some sociological approaches. At a theoretical and empirical level, this is investigated with specific reference to individualism as a consensual value and belief within western industrialised societies.

Footnotes:

1. A shorter version of this chapter has been published in the *British Journal of Social Psychology*. M. Augoustinos (1991). Consensual representations of social structure in different age groups. *British Journal of Social Psychology* , 30, 193-205 (see Appendix E).

2. To substantiate the socioeconomic differences between the two schools, each subject's SES was classified according to the higher of the two parents' occupations. This was done using Stimson & Cleland's (1975) occupational categories. Of the sample (both year 9 and 12 students), 28.38% of students from School A compared to 85.54% of students from School B had parents with occupations typically classified as upper-

middle to high SES (employers, self employed, administrative, managerial, executive, professional and technical); whereas, 71.62% of students from School A compared to only 12.05% of students from School B had parental occupations typically categorised as lower-middle to low SES (transport and communication workers, production, craftsmen and labourers, service and recreation workers, unemployed and other welfare recipients). Two students from School B could not be coded for SES due to ambiguous information.

3. Even though stress values decline considerably for the 3 and 4 dimensional solutions, these produced configurations whereby dimension 2 was uninterpretable. Thus the 2 dimensional solution was chosen as the most optimal.

4. See also individual subject weights for the adult sample in Appendix B6. Male subjects are identified by an asterisk. Normalised subject weights for ANAVA are also presented in Appendix B6.

PART II

Chapter 5

Attributions, Representations and Individualism.

Introduction:

The second part of this thesis is analytically distinct from the previous section. It continues the same theme, however, by making further links between social representations theory and mainstream concepts in social cognition. This chapter will begin by exploring the interconnections between attribution theory and social representations. It will be argued that the study of social representations is crucial for understanding what kinds of attributions people make and in what contexts. More specifically, this chapter will focus on the social origin of attributions: what wider social or societal beliefs or knowledge form the basis upon which explanations for everyday events are made?

While social representations were operationally defined as internalised social knowledge structures in the empirical work outlined in Part I, such knowledge structures can also reflect or encapsulate the dominant values and widespread beliefs of a society. It will be argued in this chapter that it is from the dominant values and widespread beliefs which circulate within a society that common-sense theories and explanations are drawn. This linkage will be discussed with particular reference to individualism as a dominant and widespread (consensual) value and belief system in western societies. There is considerable evidence from research in attribution theory that the prevalence of particular kinds of attributions which people make, and explanations that they give for events and occurrences, reflect a consensual and widespread individualist value orientation.

Additional evidence from a variety of sources, especially from the work on the sociology of psychological knowledge and various empirical strands of the psychological and sociological literature, also point to the pervasiveness of individualism as an ideology or belief system (representation) influencing and mediating people's understanding of the social world. Some of this literature will be reviewed in this chapter.

Finally, the role of widespread belief systems and knowledge in maintaining socio-cultural system support will be discussed. In a recent book edited by Fraser & Gaskell (1990), it has been argued that some beliefs may be so extensively shared that they contribute to the support and maintenance of a socio-cultural system. That is, some widespread beliefs and values may provide the legitimacy for supporting the socioeconomic, political and

institutional structures of a society. Clearly, some social representations which are consensual, widespread and prescriptive may also be seen to contribute to the social cohesion of a society. Moscovici, however, has had little to say about the political and social implications emanating from widely held social representations. Two sociological theories which have dealt with this issue will be briefly discussed. Value consensus theories and the Marxist notion of ideological hegemony have attempted to account for the social cohesion of liberal democratic societies. They are discussed generally for their relevance to social representations theory, but also for their relevance to the specific issue of the prevalence of individualism as a widespread and consensual representation in western democratic societies.

It should be emphasised that the interdisciplinary connections made within this chapter are not exhaustive. Neither is the empirical research which is surveyed in these diverse areas. Rather, this chapter attempts to draw together ideas and concepts from diverse but representative sources, with the intent of demonstrating the relevance and scope of social representations theory in understanding why it is that an individualist value orientation is a dominant and pervasive feature of our society. Essentially, this chapter forms the theoretical basis for the exposition of the empirical research detailed in Chapter 6.

Attribution Theory and Social Representations:

Attribution theory invariably has been described as the cornerstone of American social psychology, dominating social psychological research over the past two decades. Since Heider's (1958) pioneering formulations about common-sense causal explanations, attribution theory has undergone several extensions, the most notable being Jones and Davis's (1965) correspondent inference theory and Kelley's (1967) ANOVA model or theory of covariation. More recent extensions to the huge body of work on attributional processes have been critical evaluations of the conceptual assumptions and limited empirical applications of attribution research.

Two major recurrent criticisms have been made of attribution theory. Firstly, it has been argued that attribution theory exaggerates the tendency for people to seek causal explanations for everyday occurrences and events. It is suggested that people do not engage in such

exhaustive cognitive activity as, for example, Kelley's ANOVA model would suggest but, instead, are cognitive misers who use heuristics as short-cuts for making judgements and inferences generally and, more specifically, for attributing causality. Secondly, there have been criticisms that attribution theory has been asocial, since the major threads of research have been carried out from an individualistic perspective (see Hewstone, 1983).

Weiner (1985) recently has focused on the problem of whether people engage in spontaneous causal thinking or whether, in fact, the extent and nature of attributional activity that the research suggests is an artefact of the reactive methodologies used in attributional research. As Bond (1983) points out, the 'ecological validity' of attribution theory has not been tested adequately. In reviewing the small number of attributional studies which utilise nonreactive methodolgies such as the coding of written and conversational material, verbalisations during task performance and causal inferences from the performance of cognitive tasks such as sentence completion, Weiner (1985) concludes that people do indeed engage in 'spontaneous' causal thinking but, most particularly, for unexpected events and nonattainment of goals (failure). As Hewstone (1989b) points out, this conclusion is consistent with that of others' (e.g.; Mackie, 1965, 1974; McIver, 1942) who have argued that people look actively for causal explanations for the unexpected or different. Similarly, Lalljee, Watson & White (1982) have demonstrated that the complexity of attributions increases for unexpected behaviour with an increase in both personal and situational explanations.

In an attempt to deal effectively with the major undercurrents of criticism, there has emerged an interest in forging links between attribution theory and the theory of social repesentations. Both Moscovici (1981, 1984a; Moscovici & Hewstone, 1983) and Hewstone (1989a; 1989b) have proposed that social representations should be viewed as the bases upon which attributions are made.

> "A theory of social causality is a theory of our imputations and attributions, associated with a representation . . . any causal explanation must be viewed within the context of social representations and is determined thereby" (Moscovici, 1981, p. 207).

Hewstone (1989a; 1989b) proposes that social representations form the foundations of people's expectations and normative prescriptions, and thus act as mediators in the attributional process. In a similar vein, Lalljee & Abelson (1983) emphasise a knowledge structure approach to attribution. Well-learned and consensual structures, such as highly organised and stereotyped event schemata or scripts (Schank & Abelson, 1977), usually do not evoke causal explanations because people come to expect the sequence of events that follow. For example, it makes more sense to ask: "what did you eat at the restaurant?" than "why did you eat at the restaurant ?" People's prior expectations and knowledge structures or schemata (see Chapter 2) will determine for what incoming social information they will need to engage in causal attributions. Schema or representation consistent information will not require an in-depth search for causality, given that the information is expected and therefore automatically processed. However, schema inconsistent information will require a more detailed search for an explanation.

> "Thus social representations impose a kind of automatic explanation. Causes are singled out and proposed prior to a detailed search for and analysis of information. Without much active thinking, people's explanations are determined by their social representations" (Hewstone, 1989b, p. 10).

The social foundation of such automatic explanations is that they are learned and thus socially communicated through language. The use of cultural hypotheses to explain behaviour and events can be regarded as a kind of 'socialised processing' (Hewstone, 1983; 1989a; 1989b). Culturally agreed upon explanations eventually come to be regarded as common-sense explanations, much like witchcraft is regarded as a common-sense and automatic explanation for misfortune among the Azande (Evans-Pritchard, 1976). Each society has its own culturally and socially sanctioned explanation or range of explanations for phenomena such as illness, poverty, failure, success, violence, crime, etc. People therefore do not always need to engage in an active cognitive search for explanations for all forms of behaviour and events. Instead, people evoke their socialised processing or social representations for expected and normative behaviour and events.

In a somewhat similar vein, Andersen & Klatsky (1987; Andersen, Klatsky & Murray, 1990) show that information organised in trait terms is less vivid and more inefficiently used

in information processing than information which is organised in terms of stereotypes, which are akin to representations.

As Hewstone (1989a; 1989b) makes clear, such a knowledge or representation-based approach to attribution will necessitate the study of social knowledge itself. Research into the information base which people have about particular social domains will reveal pre-existing knowledge structures and expectancies which people use to filter and process incoming information. Instead of focusing exclusively on processes by which causal statements are generated, a knowledge-based approach to attribution would extend attribution research by studying the actual language people use when making attributional statements in naturalistic conservations and environments. Furthermore, such an approach may contribute to our understanding of the social origins of causal attributions (where attributions come from).

A social representations perspective or knowledge-based approach to attribution is applied below, in order to understand the social origin(s) of the 'fundamental attribution error'.

The Social Origins of the Fundamental Attribution Error:

The study of perceived causation embodied in attribution theory concerns itself essentially with what passes as everyday social explanation for events and occurrences. Central to the theory is that two main kinds of attributions are made by people to account for causality: dispositional or personal attributions and situational or contextual attributions. These two modes of explanation correspond to what Billig (1982) refers to as the 'individual' and 'social' principles. One of the most interesting and consistent findings in attribution theory is what has been termed the 'fundamental attribution error' - the tendency for individuals to over-attribute another person's behaviour to dispositional characteristics of the person, rather than to situational/contextual factors (Ross, 1977). Considerable debate and discussion has centred around the reason for this error or, perhaps more accurately, 'bias' (Harvey, Town & Yarkin, 1981; Kruglanski & Ajzen, 1983). Heider (1958) has argued that behaviour has such salient features that it tends to engulf the field, and Fiske and Taylor (1984, p. 74), in support of this cognitive explanation, describe how situational factors which give rise to

behaviour, such as the social context, roles or situational pressures, are "relatively pallid and dull and unlikely to be noticed when compared with the dynamic behavior of the actor". The dominance of the actor in the perceptual field is, therefore, advanced as an explanation for this attributional bias.

More recently, it has been advanced that this dispositionalist bias is not a universal law of human cognitive functioning, but is deeply rooted in the dominant ideology of individualism within European and American culture (see Farr & Anderson, 1983; Moscovici & Hewstone, 1983; Bond, 1983). The tendency to over-estimate personal over situational causation was first noted by Ichheiser (1949) but, instead of viewing this phenomenon as an individual 'error' in cognitive judgement, Ichheiser viewed it as an explanation grounded in American society's collective and cultural consciousness (Farr & Anderson, 1983). Thus the dominant representation of the person in western liberal democracies is that of an important causative agent, over and above situational and contextual considerations. Political philosophers (e.g., Macpherson, 1962; Lukes, 1973) have posited the importance of individualism as an ideological doctrine specific to liberal democratic societies and, most particularly, within American social, cultural and political life. Emerging as a philosophical doctrine in the 19th century with the advent of the capitalist mode of production, liberal individualism's central tenets emphasise the importance of the individual over and above society, and view the individual as the centre and focus of all action and process. Lukes (1973) shows how most areas of human activity in western societies are imbued with these individualist tenets, including political, economic, religious, ethical, epistemological and methodological concerns. The anthropologist Geertz (1975) has said the following about the individualistic representation of the person:

> "The western conceptions of the person as a bounded, unique, more or less integrated motivational and cognitive universe, a dynamic centre of awareness, emotion, judgement, and action organised into a distinctive whole and set contrastively both against a social and natural background is, however incorrigible it may seem to us, a rather peculiar idea within the context of the world's cultures" (p. 48).

Indeed, research within the attribution tradition goes some way towards supporting this cultural or anthropological view. Attribution research has found a significant tendency for

dispositional attributions to increase with age in western cultures. Whereas young western children tend to make references to contextual factors to explain social behaviour, western adults are more likely to stress dispositional characteristics of the agent (Peevers & Secord, 1973; Ruble, Feldman, Higgins & Karlovac, 1979). Furthermore, cross-cultural differences in attribution have been observed (Shweder & Bourne, 1982), with non-western adults placing less emphasis on the dispositional characteristics of the agent and more emphasis on contextual/situational factors than do western adults. These developmental and cross-cultural differences have been explained within cognitive and experiential terms. For example, it has been argued that young children are limited in their cognitive capacity to make dispositional attributions

> ". . . because they have not developed the abstract classificatory abilities
> required for summarising behavioural regularities by means of dispositions.
> [and]. . [n]on-western attributors fail to emphasise dispositional modes of
> attribution because they lack exposure to the more complex experiential
> conditions, associated with modernisation which make it functional to use
> taxonomic modes of categorisation" (Miller, 1984, p. 962).

Miller (1984) points out that such explanations disregard totally the possibility that these developmental and cultural differences may "result from divergent cultural conceptions of the person acquired over development in the two cultures rather than from cognitive or objective experiential differences between attributors" (p. 961). Western notions of the person are essentially individualistic - emphasising the centrality and autonomous nature of the individual actor in all action and process, whereas non-western notions of the person tend to be holistic, stressing the interdependence between the individual and the surround. The developmental or age differences in attribution merely reflect the enculturation process - the gradual process by which children adopt the dominant conception of the person within the culture.

Indeed, Miller's (1984) research confirms this cultural hypothesis. A cross-cultural study was undertaken to compare the attributions made for prosocial and deviant behaviours by a sample of Americans and Hindus of three different age groups (8, 11, & 15 years), together with an adult group (mean age = 40.5 yrs). Miller found that at older ages Americans made significantly more references to general dispositions (M = 40%) than did Hindus (M =

<20%), most of these dispositions referring to personality characteristics of the agent. However, there were no significant differences which distinguished the responses of the 8 yr old and 11 yr old American children from those of their Hindu counterparts (the difference was of the magnitude of an average of 2%). Within culture developmental trends indicated a significant linear age increase in reference to general dispositions among Americans, but not among Hindus. Expectedly, it was found that, at older ages, Hindus made significantly greater reference to the context (M = 40%), than did American adults (M = 18%), referring to social roles, patterns of interpersonal relationships and references to the placement of persons, objects or events in time or space. As Miller point out, "such modes of attribution may be seen to be reflective of Indian cultural conceptions in their emphasis in locating a person, object, or event in relation to someone or something else" (p. 968). Children displayed little cross-cultural differences in the number of contextual attributions made. However, these were referred to frequently at younger ages in both Hindu and American children. Furthermore, a significant linear age increase in references to the context was observed amongst the Hindus but not amongst the Americans.

Moreover, Miller found that these results could not be explained by the competing cognitive and experiential interpretations. No significant age or culture effects were observed in a classificatory task designed to assess a subject's ability to classify on the basis of conceptual similarity. All age/cultural subgroups were able to identify correctly word pair relationships in their abstract mode, on an average of at least 82% of the time. Although this finding does not eliminate totally the possibility that age and/or cultural differences in classificatory abilities exist, it at least demonstrates that subjects of all ages in both cultures demonstrated at least some ability to classify on the basis of conceptual similarity.

To test the experiential hypothesis against the cultural hypothesis, Miller compared subgroups of Indian adults who varied in their exposure to modernisation, and subgroups who varied in their subcultural orientation. These subgroups included: (1) a Hindu middle-class sample; (2) a lower middle-class Hindu sample; and (3) a lower middle-class Anglo-Indian sample of mixed Euro-Indian descent. If the experiential hypothesis was to be confirmed, references to general dispositions of the agent would be related significantly to

exposure to modernising conditions which, in turn, would reflect socio-economic class differentials: the middle-class Hindus making the greatest reference to dispositions; the lower middle-class Anglo-Indians making slightly less reference to dispositions; and the lower-class Hindus making the least reference to dispositional factors. Instead, it was found that the lower middle-class Anglo-Indians made the greatest reference to dispositional factors, differing significantly from both middle-class and lower-class Hindus who, in turn, did not differ significantly from each other, despite the marked difference in their socio-economic status. This finding is accounted for by the maintenance of a semi-westernised cultural meaning system among the Anglo-Indian group, which is consonant with the cultural interpretation of attributional diversity. Thus, not only did the prevalence of dispositional attributions vary across cultures, it also varied with subcultural orientation within India.

It appears, therefore, that the tendency to over-rate personal/dispositional factors of the agent in western adults cannot be explained adequately by cognitive and experiential interpretations alone. The attribution 'bias' is not a cognitive property or universal law of psychological functioning - it is culture specific. Though the agent of action tends to dominate the perceptual field for Anglo-Americans, the 'person' does not seem to enjoy the same degree of perceptual dominance amongst non-western peoples.

The role that the individualist 'ethos' or 'ideology' plays in the social-psychological functioning of people living in western democracies is therefore well-demonstrated by what we know from attribution theory. Social pychologists, however, have been reluctant to interpret such findings within a socio-cultural framework. The tendency to interpret such phenomena within the context of the individual, as reflected by the cognitive and experiential explanations cited above, merely highlights that the attribution 'bias' or individualist mode of explanation is not only the most dominant mode used in everyday social explanation but is also the most dominant mode used in psychological research and discourse.

The Sociology of Psychological Knowledge and Everyday Social Explanation:

With the advent of the sociology of psychological knowledge, it has been argued that the cultural ethos of 'liberal individualism' within the Anglo-American context has influenced the

nature and content of psychological theories and concepts (see Chapter 1). For example, Buss (1976) shows how social, political and economic forces and, in particular, the doctrine of individualism, gave rise to the study of individual differences and eugenics in late 19th century England. Similarly, Buss (1979) has outlined how American liberal individualism has influenced the theoretical development of humanistic psychology and, more specifically, Maslow's theory of self-actualisation. Brandt (1970) has linked behaviourism's theoretical preponderance to the similarity between its principles and the American ethos of 'doing and action'. Sampson (1977), among others, has noted the self-contained individualistic emphasis on our conceptions of mental health. As mentioned in Chapter 1, social psychology has not been immune from the same critique, with various writers commenting on the cultural, historic-specific and individualistic nature of theories of social behaviour (e.g., Gergen, 1973; Manicas & Secord, 1983; Pepitone, 1976, 1981; Sampson, 1977).

These epistemological and sociological analyses demonstrate the pervasive interplay between society's ideological and cultural structure and the social construction of knowledge. If self-contained individualism exerts an ideological influence on the development of our theoretical and conceptual constructs for explaining individual and social behaviour, then surely it also exerts a similar influence on what passes as everyday knowledge for the rest of society. However, as Berger & Luckmann (1966) have argued, the discipline of the sociology of knowledge has progressed with an almost exclusive interest in the social construction of theoretical or intellectual thought, with an insufficient emphasis on what passes as everyday knowledge for lay people within any given society. With its focus on the lay person or 'naive psychologist', attribution theory has, albeit in a limited way, answered Berger & Luckmann's call for the study of the social construction of everyday explanation. Through the discovery of the 'fundamental attribution error', or bias, it has demonstrated unwittingly the pervasiveness of the individualist ethos in liberal democratic societies.

Within mainstream social psychological research and research within the social representations tradition, relatively little work has been done to ascertain the extent of the individualist ethos in society, or its prevalence amongst different social categories. Although work has been done to isolate the political implications emanating from a liberal individualist

dominant culture (Connell, 1977), little systematic work has been done to determine what social psychological implications it has in structuring social reality for individuals and groups (Sampson, 1988). Two notable exceptions are research in equity theory, linking found cultural differences in distributive justice to the categorisation of the culture as individualist or collectivist in orientation (Bond, Leung & Wan, 1982; Mann, Radford & Kanagawa, 1985; Sampson, 1975), and research on the Protestant Work Ethic (see Furnham, 1984 for review), though the tendency has been to treat this value orientation more as a personality variable than as a socio-cultural belief system.

The following section attempts to synthesise various social psychological and sociological findings which have either specifically addressed the issue of individualism as an important ideological construct mediating social experience or, indirectly, discovered its pervasive influence on people's attitudes and behaviour. It is by no means an exhaustive and definitive coverage of the area.

Empirical Research Pertaining to Individualism:

Feldman (1983) attempted to measure the strength of the American public's belief in economic individualism by using a series of 10 items in the 1972 Centre for Political Studies (CPS) election study. Feldman argues that two distinct components make up the American ethos of economic individualism: the work ethic and the principle of equality of opportunity. The work ethos, of course, is related to protestant values of hard work and thrift which have become embodied in the cultural value of personal achievement. Social mobility is therefore seen as related directly to hard work and personal effort, and poverty as reflecting a lack of these desired instrumental behaviours. At the same time, there has been a strong American commitment to equality. The American notion of equality, however, has been characterised by an emphasis on formal political equality rather than an 'equality of results' or, more specifically, economic equality. Items used by Feldman offered both personal and structural explanations for poverty. Although the sample acknowledged that, generally, inequalities of opportunity did exist for the poor, it was believed that hard work, drive and ambition (work ethic) compensated. He found that individualistic explanations for poverty were held

extensively and he concluded that no greater than 18% of the public, and probably less than 10%, rejected individualistic beliefs to a considerable degree.

Within the psychological literature the preponderance of individualistic explanations for poverty has also been found. Feagin's (1972) survey of around 1000 randomly selected Americans found individualistic explanations for poverty (lack of thrift and proper money management, lack of effort and loose morals) were favoured over structural (societal) and fatalistic (bad luck, lack of ability and talent) explanations. Feather (1974), in an Australian study, found a similar preference for individualistic explanations, though Australians were less likely to endorse individualistic explanations compared to Feagin's American sample. As well as an overall prevalence of individualistic explanations, both studies found demographic differences in explanations. Feagin found that respondents who were most likely to endorse individualistic explantions were white Protestants and Catholics, respondents over 50 years of age, those of middle socioeconomic status and respondents with middle levels of education. People most likely to endorse structural reasons for poverty were black Protestants and Jews, respondents under 30 years of age, and those of lower socioeconomic status and education. The most striking group difference in Feather's study was that older respondents were more likely to support individualistic explanations than were younger respondents.

More recently, Furnham (1982a) found that political voting patterns were related to explanations of poverty. In a British middle-class sample, Furnham found that Conservatives were more likely to rate individualistic explanations as important than were Labor voters. In turn, the latter differed significantly from Conservatives, in that they placed more importance on societal-structural reasons. Studies have also linked individualism with racial prejudice. For example, Kinder and Sears (1981) propose that an earlier form of white supremacist and segregationist racism in the United States has been replaced with a more diluted variant which they refer to as 'symbolic racism'. Symbolic racism entails negative affect towards blacks "based on moral feelings that blacks violate such traditional American values as individualism and self-reliance, the work ethic, obedience and discipline" (p. 416). Further, Katz & Hass (1988) found that, amongst white college students, an individualist value orientation, as

embodied in the Protestant work ethic, was related significantly to prejudicial attitudes towards blacks. In contrast, an humanitarian-egalitarian value orientation was associated with non-discriminatory racial attitudes.

Studies on explanations for unemployment have also looked at the prevalence of individualistic explanations. Schlozman and Verba (1979), in their study on unemployment, class and political response, found that the 'American social ideology' of individualism (the American Dream) was maintained strongly by respondents in their sample, irrespective of socioeconomic status. Furthermore, they posit that 'individualism' as a social ideology is largely responsible for undermining class consciousness amongst American workers. Schlozman and Verba found that, among their work-force sample, 68% regarded 'hard work' as being the most important factor in determining who gets ahead, while only 8% regarded 'luck' as important, and 24% posited family background as instrumental to success. Seventy-one per cent believed that the child of a factory worker had at least some chance of becoming a business executive or professional, and 31% believed that the chances for the child of a factory worker to get ahead relative to those for the child of a business executive were about the same. Few occupational differences were found in attitudes toward success and opportunity, except for the question about a worker's child having a good chance to get ahead, where consistent but small differences were found between lower-status occupations and higher status occupations, the former being more sceptical about the chances of success for a worker's child.

Schlozman and Verba also found little difference in the strength of commitment to individualistic notions of success between employed and unemployed members of the same occupational level. At least 60% of people in each unemployed category believed that hard work is instrumental to success. The authors argue that this finding is remarkable, given that one would expect that a personal experience such as unemployment would undermine the credibility of such individualistic notions of success, and throw doubt on the belief in the openness of the opportunity structure for personal advancement. Schlozman and Verba suggest that perhaps "social ideology as embodied in beliefs about mobility does not appear sensitive to the individual's personal experience" (p. 140). Similarly, the unemployed do not

differ from the employed in the extent to which they are class-conscious. The personal experience of unemployment, therefore, does not appear to heighten class consciousness, as some political scientists have speculated. The net political effect of this is clear: the commitment to the individualist ethos, especially amongst the lower socioeconomic class and the unemployed, minimises discontent and curbs the political and economic demands made on the government by disadvantaged groups in society. The unemployed workers in the sample did not specifically blame themselves for their joblessness but they did, however, regard it as their own responsibility; i.e., the primary locus of responsibility was considered to be the individual.

Studies in the psychological literature, however, have not found such a pervasive influence of individualist explanations for unemployment. Using Feagin's (1972) three categories of explanations (individualistic, societal and fatalistic) which have characterised the work on explanations for poverty, Furnham (1982b) found that, overall, individualistic explanations for unemploment were thought least important, and societal explanations most important, in a sample of around 300 predominantly middle-class, well-educated Britons. His sample also included 100 unemployed subjects who had been unemployed for between three and five months. Unlike Schlozman and Verba's unemployed, these subjects preferred societal explanations over individualistic ones. Both employed and unemployed subjects rated world-wide recession and inflation, and policies and strategies of the present and past British Governments, as the most important causes for unemployment. Similarly, Gaskell and Smith (1985) had a randomly selected sample of British male school leavers respond to an open-ended question on the main causes of unemployment among young people, and their relative agreement to two fixed questions attributing responsibility for reducing unemployment to: (1) the unemployed themselves (internal) and (2) the government (external). External (societal) attributions of unemployment were considered more important than internal or individualistic attributions.

In an Australian study, Feather (1985) found a similar preference for external/societal explantions for unemployment among a sample of introductory psychology students. Factors such as defective government, social change and economic recession were rated as more

important than the unemployed's lack of motivation or personal handicap. However, one should be careful not to abandon altogether the relevance of internal factors, since one individualistic factor, which referred to the lack of skills and competence in the unemployed, was rated as the most important of all. Feather found a relatively greater emphasis on internal explanations for unemployment in a sample of 334 16-year-olds. While socioeconomic reasons such as recession and social change were seen as most important, competence deficiency and lack of motivation in the unemployed were also seen as relatively important.

The reviewed studies above on explanations for unemployment also explored possible relationships between explanations and demographic, poltical and value orientation variables, which will not be reviewed here in detail. Needless to say, differences were found between employment status and political voting preferences in explanations by Furnham (1982b), which received only limited support in Gaskell and Smith's (1985) study. Feather (1985) found interesting relationships between explanations and subject scores on Wilson and Patterson's (1968) Conservatism Scale, and some of the terminal and instrumental values contained in the Rokeach Value Survey (Rokeach, 1973).

Comparisons between studies are difficult, since different samples (most of which are not representative of their respective populations at large) are surveyed. Overall, it seems that, while individualistic factors are not entirely ignored in explanations for unemployment, in the psychological studies, at least, societal and structural factors are rated as more important. Several factors may account for Schlozman and Verba's contrary findings to the rest of these studies. Firstly, the research was not conceived within the same theoretical perspective of the other studies which have used attribution theory and the internal and external distinction as a primary focus. Rather, these sociologists have focused on views related to the openness of the opportunity structure and, more specifically, the possibility of social mobility. While this is no doubt related to explanations for unemployment, the issues of social mobility and opportunities for people to get ahead were not explored in the psychological studies. Indeed, individualist explanations may be more important on these issues than explanations for unemployment. It is also possible that cultural differences may account for the prevalence of individualistic factors in the American study, which may not be

as entrenched ideologically in Britain and Australia. Furthermore, Schlozman and Verba's study preceded the other research and it is likely that historical factors may be at play. Since the 1930s 'Depression', unemployment reached its highest levels in the latter part of the 70s and early 80s. Before this, most western capitalist countries had experienced unprecedented economic growth and full employment. Kelvin (1984) argues that, as unemployment increases and becomes a major economic problem, individualist explanations for its occurrence are likely to become less important, with most people, particularly the media, focusing on structural and socioeconomic explanations. Thus historical trends in explanations, with a specific emphasis on cohort effects, would be of considerable advantage (see Jennings & Markus, 1984).

It should be stressed, however, that, while external and structural factors dominate the explanations for unemployment in the studies reviewed, specific individual factors, such as skill and motivation deficiencies, are also rated highly as reasons for unemployment.

Individualism: Collective Representation,Value Consensus, Ideological Hegemony and Ambivalence.

The preceding research, as well as work in the sociology of psychological knowledge, points clearly to the importance of the individualist ethos in western liberal democracies. While there is no doubt that not every individual within these societies subscribes to this ethos and that, indeed, there are important group differences in the extent to which the ethos is maintained, some empirical research does seem to suggest that individualism as a representation, value orientation or ideology is pervasive enough to be considered a 'collective representation' in the Durkheimian sense.

Moscovici has said very little about the role social representations may play in providing socio-political system support. It is reasonable to suggest that a representation which is very pervasive and widely shared within and between groups in society will have precisely this effect. There are several theoretical orientations in the political and sociological literature which consider the role which such pervasive value orientations play in the maintenance of sociocultural system support, or political and social harmony within a society.

Value consensus theorists such as Almond and Verba (1963), Easton and Dennis (1967), and Dahl (1967) stress the importance of consensual values and norms shared by many people within a society for maintaining a society's cohesion and stability. Even if there is insufficient agreement as to what are these consensual or core values, norms, beliefs, and to what extent they are maintained, most of these theorists argue that there is at least some 'minimum legitimating consensus' contributing to overall sociocultural and political system support. On the other hand, conflict theorists in the Marxist tradition stress the importance of the existence of differential class interests and values which, theoretically at least, would lead the oppressed classes to challenge ultimately the status quo and the economic and political stability of liberal democracies. The very fact that this has not occurred as yet within advanced capitalist societies has led to a body of theoretical work within the Marxist tradition, which tries to account for the working class's failure to challenge the capitalist ruling class. The oppressed are seen either to comply behaviourally with the role demands of a capitalist society or, worse, to adopt and internalise the values of their oppressors. While consensus theorists argue that value consensus arises from the mutual benefits derived by different interest groups in society through adhering to these values, Marxists see this consensus as arising from class domination. These values are not seen as reflecting the 'true' interests of the lower socioeconomic classes, but rather as a form of 'false consciousness'.

Gramsci originally introduced the concept of ideological hegemony to account for the political and economic domination of the capitalist class (Salamini, 1974). Hegemony refers to the way in which "a certain way of life and thought is dominant, in which one concept of reality is diffused throughout society in all its institutional and private manifestations" (Williams, quoted by Sallach, 1974, p. 41). Clearly, there exists within any society at any given time a number of conceptions of the world (Weltanschauung) which are not structurally or culturally unified. The hegemonic process can be described as the way in which one conception diffuses throughout society, forming the basis of the dominant ideology. Many factors influence what becomes the dominant conception of the world, but it is related predominantly to its ability to 'make sense' of the structural organisation of society: the dominant social, political and economic relations. Hegemony theorists argue that the ruling

class is able to propogate and diffuse the dominant view, not only because it controls the economic and political institutions of a society but also because it has the power to 'manage' the primary ideological institutions (religion, culture, education, communications, media, etc.). Hence, Marx's dictum that the ideas of the ruling class are the most dominant ideas in every historical period (Marx & Engels, 1947). The dominant class is therefore able to propogate views which reinforce its structural position and the structural organisation of society. It has the power to:

> "define the parameters of legitimate discussion and debate over alternative beliefs, values and world views . . . censorship and direct inculcation are extreme instances in the hegemonic process. The most effective aspect of hegemony is found in the suppression of alternative views through the establishment of parameters which define what is legitimate, reasonable, sane, practical, good, true and beautiful" (Sallach, 1974, p. 41).

The ideological significance of hegemony can be located in the power to define the model of humanity which becomes predominant. Ideological domination is exercised through the diffusion, popularisation and internalisation by people of the dominant ideology, which ultimately becomes 'common sense knowledge' or 'objective truth'. Thus:

> "ideology is not a collection of discrete falsehoods but a matrix of thought firmly grounded in the forms of our social life and organised within a set of interdependent categories. We are not aware of these systematically generative interconnections because our awareness is organised through them" (Mepham, 1972, p. 17).

Consistent with the notion of ideological hegemony, Moscovici (1988) has also referred to hegemonic representations. However, Moscovici (1984a) eschews the idea that everyone is always under the sway of the dominant ideology. No one would disagree, since this would deny the constructivist and reflective capacities of people. At the same time, Moscovici refers to the prescriptive and compelling nature of some social representations through their historical reproduction. These are also central features of Marxist hegemonic theory.

The assessment of the relative validity of the alternative approaches put forward to account for the social cohesion of liberal democracies is beyond the scope of this thesis. However, Mann (1970), in reviewing the various sociological studies concerning the legitimacy of the social structure within liberal democratic societies, found little support for the popular notion that value consensus exists within these societies, particularly for

proposed consensus values relating to harmonistic images of society, images of political efficacy and norms relating to class action and equality. Rather, there exist class differences with greater consensus being evident among the middle class than among the working class (see also Abercrombie & Turner, 1978). Indeed, he argues that it is this ideological cohesiveness in the middle to upper classes and ideological disunity amongst the lower classes which helps maintain the stability within these societies. Similarly, Barnum and Sullivan (1990) show that political freedom in Britain and the United States is secured largely by the existence of attitudinal tolerance among the political elite. In contrast, the general public are significantly less tolerant.

Importantly, however, Mann concludes that one of the few value orientations in which studies do indicate a dominant consensus is in relation to individualist values of achievement. His review of the research indicates that a significant degree of 'dominant consensus' exists between and within classes in both England and the U.S. regarding statements such as, "it is important to get ahead", and that hard work and ability rather than luck are instrumental for success (consistent with the findings of Schlozman & Verba, 1979). This is particularly so for highly valued pursuits, such as materialistic and occupational goals. Connell (1971) refers to this as 'possessive individualism' and argues that it is the most distinctive value orientation characterising liberal democratic societies. Possessive individualism has been defined by Connell as the emphasis of welfare and success in personal and private terms. In a study of Australian children, Connell found that, by adolescence, a commitment develops towards private goals and private fulfillments rather than collective ones. Evidence suggests that this value orientation is not present in younger children aged 5 to 7, indicating that the experience of late childhood and adolescence is decisive for the development of this value orientation, probably reflecting an enculturation process similar to that found by Miller (1984).

Thus, although there may not exist the extent and degree of normative values in 'successful' liberal democracies as some theorists would argue, a 'minimum legitimating consensus' in the form of individualist values or an individualist ideology appears to exist which, ultimately, contributes to system support and stability. As evidenced by the empirical

literature, individualism, as a model of humanity, forms an important basis for making attributions about societal events. Its pervasiveness is no doubt linked to its ability to 'make sense' of the social conditions or reality of a capitalist society. Indeed, its emergence as a philosophical doctrine has been clearly associated with the arrival and establisment of the capitalist mode of production. Individual merit and success is clearly rewarded in such societies and competition which forms the cornerstone of economic relations is heralded as the most effective and efficient means by which to motivate individuals in most spheres of social life. Social mobilty is upheld as evidence for the openness of opportunities within such societies and, indeed, people's very experience or observations of upward mobility further cements the view that what determines success in such societies is individual ability and effort.

It may be an over-simplification to characterise our culture as individualistic, however. Billig (1982), for example, points out that both modes of explanation - the personal and the situational - coexist within contemporary western society. He challenges the theoretical division between the personal and situational modes of explanation, preferring to conceptualise them as merely different parts of the same total explanation. Indeed, Billig demonstrates that most experimental studies in attribution focus on the most dominant mode of explanation given by the subject, but rarely do these studies emphasise the fact that most subjects give mixed responses, giving both dispositional and situational explanations. This criticism can also be made of the sociological research. Thus, in reality, both individualist and social patterns of belief exist and should not necessarily be viewed as contradictory. Similarly, Lynd (1939) emphasised the co-existence of seemingly conflicting cultural values within American society, the most notable of which are the opposing values of individualism and collectivism. More recently, Katz & Hass (1988) have assessed the co-existence of individualist and humanitarian-egalitarian value orientations, and have predicted racial attitudes based upon the dominance of one over the other. Lynd, however, does not regard these different value orientations as 'genuine psychological contradictions' but as integrally connected. On this basis, Billig (1982) argues that it would not be difficult to formulate a psychological theory

"which postulated the existence of ambivalence as a general factor of social systems. This general theory would have as its guiding principle the methodological injunction to seek out countervailing themes behind any simple description of social behaviour. The injunction would be to look for the seemingly paradoxical features of social organisation, which appear to be contradictory on one level, but which at another level contain a consistent logic" (p. 189).

Whilst not disputing Billig's claim that both modes of explanation exist within our culture, and that these two modes are not necessarily in conflict with one another, the fact remains that there exists a tendency in western societies to emphasise the personal aspect of the total explanation. The argument here is that this emphasis or bias appears to reflect an underlying ideological or consensual mode of thinking in western societies: a 'collective representation'.

Conclusion:

As Hewstone (1989) argues, most research in the attribution literature has been done at the intra- and inter-personal levels of inquiry. It is clear that attributions or lay explanations for everyday behaviour, occurrences and events are not only the outcome of internal, individual cognitive processes. Rather, from the research reviewed in this chapter, some attributions can be seen to be truly social phenomena in that often they are based on widely held and shared beliefs in the form of social and collective representations.

Just as Moscovici has referred to a 'thinking society', Hewstone (1989a) has referred to an 'attributing society' - the propensity of people to seek explanations within the predominant cultural framewok, especially for societal events such as poverty and unemployment. The following chapter will explore links which can be made between social representations and intergroup attributions for success and failure. Further, an empirical study will be presented investigating both the prevalence of individualistic explanations for success and failure and the tendency for these to increase with social development. Following Doise (1986) and Hewstone's (1989a; 1989b) recommendations, it is an attempt to move research away from only the intra- and inter-personal levels of analysis (levels 1 and 2 respectively) to the intergroup and societal levels (levels 3 and 4 respectively).

Chapter 6

Social Representations and Causal Attributions[1].

Representations of Social Groups as Mediators of Causal Attributions.

The social origin of the individualist representation of the person, outlined in the previous chapter, demonstrates the possible mediating role which social representations have in the making of causal attributions for everyday occurrences and events. The dominance of individualist explanations is explored empirically in this chapter by investigating its prevalence in attributing causality for academic success and failure. Consistent with the social representations literature and Miller's (1984) study, it is hypothesised that individualist explanations for success and failure increase in prevalence and preference with increased social development. This hypothesis is related integrally to the empirical research described in chapters 3 and 4, which found representations of the social structure to become more consensual over the course of adolescent and early adult development. The study to be reported in this chapter utilises the same cross-sectional age design and posits similar age related increases in consensual representations. In this case, the consensus refers to the predominance of individualist attributions for academic success and failure.

Further empirical and theoretical links are made with the previous MDS research, in that the issue of causal attributions is explored with reference to the same 12 social groups which were used in the MDS analyses. It is hypothesised that the representations associated with each of these Australian social groups mediate, and thus influence, the kind of causal attributions which are made for their perceived success and failure. Few empirical studies have actually investigated the association between the representations of social groups and attributional processes. A notable exception is a study by Hewstone, Jaspars & Lalljee (1982), which investigates the causal attributions made in achievement contexts by different groups of schoolboys. Before describing the empirical research in this chapter, Hewstone, Jaspars & Lalljee's study will be reviewed in some detail.

Whereas the first part of their study, detailed earlier in Chapter 1, elicited the representations public schoolboys (PS) and comprehensive schoolboys (CS) had of themselves and of each other, the second part of the study attempted to demonstrate the mediating role of social category membership on intergroup attributions made for success and failure. Recall that the two groups of schoolboys held very different evaluative

representations of themselves and of each other which were shared extensively within their own respective groups. PS saw themselves as more hard working, disciplined and possessing greater intellectual abilities than CS, while the latter saw PS boys as 'swots' and 'snobs'.

In the second part of the study, the same 24 PS and 24 CS, aged 16 to 17 yrs, were asked to read four background descriptions of four schoolboys hoping to gain university entrance. Information regarding the candidate's age, parents' occupations, 'O' level qualifications, intended subject at university, extra-curricular interests and whether the candidate attended a public or comprehensive school, was provided. Two of the descriptions referred to PS candidates and two referred to CS candidates. After rating these candidates on several trait dimensions, subjects were then given fictitious "A" level grades for each candidate. One candidate from each school succeeded and one from each school failed. Subjects were asked to indicate on a 7-point scale the extent to which each candidate's performance was caused by ability, effort, luck and task difficulty. Subjects were also asked to make confidence ratings of their answers.

A series of 2 (CS or PS) x 2 (CS stimuli or PS stimuli) x 2(success/failure outcome) ANOVAS was performed on the data. For ability attributions, a significant school main effect was found, CS subjects were more likely to make ability attributions than PS subjects. A main effect for outcome indicated that ability attributions were more likely to be made for success than for failure. A stimuli x outcome x school interaction indicated that PS schoolboys were more likely to attribute CS failure than PS failure, to lack of ability.

For effort attributions, significant main effects for stimuli and outcome indicated that PS performance was attributed more to effort than was CS performance, and success was due more to effort than was failure. Significant interactions indicated that PS subjects attribute success less to effort than do CS subjects (schools x outcome) and failure of the PS stimulus is attributed more to lack of effort than failure for the CS stimulus (stimuli x outcome interaction). This tendency was particularly strong among PS subjects (stimuli x outcome x school interaction).

A significant stimuli x outcome interaction for luck attributions indicated that the success of the PS stimulus was attributed more to luck than was failure, especially, although not significantly (p = .06), amongst CS subjects. For task attributions, a significant main effect for outcome indicated that failure was attributed more to task difficulty than was success.

Confidence ratings revealed a significant main effect for stimulus (subjects were more confident explaining PS performance than CS performance) and outcome (subjects indicated more confidence explaining success than failure).

Overall, the study found that PS subjects tended to attribute their own group's failure more to a lack of effort and less to lack of ability, as compared to CS subjects. The authors call this pattern of attribution a 'genetic' ideology which serves to maintain a positive group identity for the PS subjects; that is, 'CS fail because they're stupid, we fail because we don't try'. Alternatively, the CS subjects maintained a positive group identity by differentially attributing luck as the reason for the PS boys' success; e.g., 'PS are successful because they are lucky - they attend a public school or belong to a higher social class'.

Hewstone et al's results indicate another important finding, but one which was not alluded to by the authors. Both PS and CS subjects were more likely to make ability and effort (internal) attributions than luck and task difficulty (external) attributions for the success outcome. This pattern did not emerge as clearly for the failure outcome, although ability, effort and task difficulty attributions were favoured over luck attributions. This finding is consistent with the idea that individualist explanations are more prevalent in our society because of the dominant representation of the person as the locus of responsibility in all action and process.

In a similar vein, the purpose of the study to be reported in this chapter is to investigate the complex mediating effects of social categorisation, group membership and achievement outcome on causal attributions. In an extension of Hewstone et al's research, the present study asked subjects from a public (government) and private school to make causal attributions regarding the success and failure of final year 12 exam candidates. Twelve stimulus candidates were used, each one representing a particular social group within Australian society. A cross-sectional age design was once again incorporated by the inclusion

of students from two different age groups: year 9 (age 13 to 14 yrs) and year 12 (age 16 to 17 yrs). It was hypothesised that subjects would attribute different reasons for success and failure for stimulus categories representing different social groups, as a result of the different evaluative representations held of these groups. For example, causal attributions for the success and failure of an aboriginal exam candidate would differ from those of a white, middle-class candidate. In turn, these attributions would be influenced by the category membership of the subjects themselves. Thus possible school or socioeconomic differences in causal attributions made for the 12 stimulus categories were also expected. Also consistent with Hewstone et al's results, it was expected that internal attributions (ability and effort) would be preferred over external attributions (luck and task difficulty). It was hypothesised that this effect would be more pronounced in the older age group, as a result of increased socialisation and exposure to the relatively dominant individualist ethos in Australian society.

Method:

Sample:

Years 9 and 12 students from the same two schools participating in the MDS research took part in the study. Recall that School A is a government school in a predominantly lower middle-class and working class area. School B, on the other hand, is a private fee-paying coeducational school. Twenty-three year 9 students from school A (8 females, 15 males, mean age = 13.67yrs, Sd = 0.34) and 26 year 9 students from school B (11 females, 15 males, mean age = 13.62 yrs, Sd = 0.49) completed the attribution questionnaire. The two year 12 classes included 14 students from school A (8 females, 6 males, mean age = 16.89 yrs, Sd = 0.46) and 20 students from school B (7 females, 13 males, mean age = 16.86 yrs, Sd = 0.66).

All students were required to obtain parental consent to take part in the study, in accordance with the South Australian Education Department's guidelines for consent form procedures. The data were collected in March 1987, at the same time data were collected for the MDS study detailed in chapter 4.

<u>Measures and Procedure:</u>

After completing an MDS exercise of 66 paired comparisons of 12 stimulus categories, half the students of each class were asked to complete an attribution questionnaire. On each page of the questionnaire appeared a vignette description of a student sitting for final year 12 exams. Each vignette description was designed to be representative of a particular social group within Australian society. The 12 vignette descriptions were based on the 12 stimulus categories used for the previous MDS research. These groups were: upper class; middle class; working class; big business; trade unions; unemployed; migrants; refugees; aborigines; politicians; men; and women. The vignettes were short descriptions of final year secondary school exam candidates. The descriptions attempted to highlight only the candidate's category membership and did not refer to their abilities, interests or motivations. Gender was held constant by the use of female names in the descriptions. The exception was for the description representative of the category 'men', where a male name was used. The vignettes for the 'men' and 'women' categories were identical except for the names, one identifying a male student, the other a female. Little other background information was given in these two vignettes (see Appendix C1 for vignette descriptions and questionnaire layout). Examples of vignette descriptions include: <u>the 'upper class' stimulus,</u>

> "Elisa comes from a wealthy family. Her grandparents are very well known in the community and are considered very important people. Elisa lives with her mother and father and brothers and sisters in a huge house in the hills. It has a swimming pool, a tennis court and an enormous garden which extends into the forest. Elisa is in year 12 at school"

<u>The 'aborigine' stimulus:</u>

> "Judy is an aboriginal girl sitting for year 12 exams this year. She comes from an aboriginal settlement in central Australia and has come to the city to finish her schooling."

Some category details were difficult to ascribe to the students themselves (e.g., trade unions, big business, politicians) and had to be focused on parental occupations and interests. For example, the 'big business' stimulus description was:

"Sue's father is an important businessman. He owns several large department stores and supermarkets all around Australia. He attends many important business meetings and is always concerned about the economy. Sue's mother is also involved in the business. Sue is sitting for year 12 exams this year.

Students were asked to read each vignette description carefully and then indicate on a 1 to 7 point scale their extent of agreement or disagreement with statements regarding the students' chances of doing well in the exams or failing the exams. A value of 1 represented full agreement with the attribution statements, while a value of 7 represented disagreement with the statements.

There were 10 rating scales for each vignette, five pertaining to the success condition and five to the failure condition. Under the success condition, students indicated their relative agreement/disagreement that success in the exams was due to (1) the student being naturally bright and intelligent; (2) the student studying extremely hard; (3) the student being lucky; (4) the exams being easy. The first two causal explanations are internal attributions related to ability and effort. As well as being an internal characteristic, ability is seen as having stable but uncontrollable properties. Effort, although an internal attribution, is also unstable in nature and controllable by an individual's motivation. Attributions 3 and 4 are external attributions referring to luck and task difficulty. Luck is also conceptualised as unstable and uncontrollable, whereas task difficulty is viewed as stable but uncontrollable by the individual. (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971; Weiner, 1986). The three dimensional properties of the above 4 attributions, locus, stability, and controllability, are detailed in Table 6.1. A fifth 7-point rating scale asked students to indicate the level of confidence in their responses from 'not at all confident' to 'completely confident'. The four causal explanations and confidence rating were repeated under the failure condition. Failure in the exams was attributed to lacking ability, not studying hard enough, bad luck, the exams being too difficult.

Respondents made 120 judgements, 10 judgements for each of the 12 vignette descriptions. The order in which the vignette descriptions appeared in the questionnaire was randomised for each subject. Subjects completed the exercise during a 40-minute class lesson.

Table 6.1. Ingroup-serving and outgroup-derogating attributions in achievement contexts.
(Derived from Hewstone, 1990).

	Ingroup	Outgroup
Success	**Ability** (internal, stable, uncontrollable)	**Effort** (internal, unstable, controllable) **Good luck** (external, unstable, uncontrollable) **Easy task** (external, stable, uncontrollable)
Failure	**Bad luck** (external, unstable, uncontrollable) **Difficult task** (external, stable, uncontrollable) **Lack of effort** (internal, unstable, controllable)	**Lack of ability** (internal, stable, uncontrollable)

Results:

To investigate the first two hypotheses that subjects will make differential attributions for success and failure for different social categories, and that these attributions will be influenced by the socioeconomic group (school) membership of the students, separate ANOVAS with repeated measures were run for the different age groups and attribution conditions. Thus a series of 2 (schools) x 2 (outcome:success/failure) x 12 repeated measures (stimulus categories) ANOVAS was performed. All significant findings at the .05 level are reported.

<u>Year 9</u>

The means and standard deviations obtained by the year 9 students on attribute ratings for the 12 stimulus groups are presented in Appendix C2. Full MANOVA tables for each analysis are presented in Appendix C3. The data for the following analyses are presented in

graphic form, with the stimulus groups arrayed in the abscissa. The presentation of curves, linking the data points should not be interpreted as implying any necessary order of these groups. The data are to be interpreted as histograms only.

Ability:

The only significant finding to emerge for ability attributions was an outcome x groups interaction (Figure 6.1: $F = 2.46$, df $= 11, 473$, $p < 0.01$). For the stimulus groups women, middle class and upper class, students were more likely to attribute success than failure to ability. For stimulus groups aborigines, trade unions and working class, students were more likely to attribute failure than success to ability.

Effort:

An outcome main effect (Figure 6.2: $F = 5.63$, df $= 1, 44$, $p < .05$) indicated that success was attributed more to effort than was failure.

Task:

An outcome main effect (Figure 6.3: $F = 4.85$, df $= 1, 45$, $p < .05$) indicated that failure was attributed more to the task (difficulty) than was success. This is qualified by an outcome by schools interaction (Figure 6.4: $F = 5.29$, df $= 1, 45$, $p < 0.05$): school B attributes failure more to task difficulty than does school A. A groups main effect (Figure 6.3: $F = 2.21$, df $= 11, 495$, $p < 0.05$) indicated that students were more likely to attribute success and failure to the task for the stimulus groups aborigines, migrants and unemployed, and least likely to attribute success and failure to the task for big business and upper class.

Luck:

A significant school x outcome by groups interaction emerged ($F = 1.91$, df $= 11, 462$, $p < 0.05$). This finding is treated with some caution, since no other main effects or lower-order interactions emerged.

Confidence Ratings:

No significant effects emerged for confidence ratings.
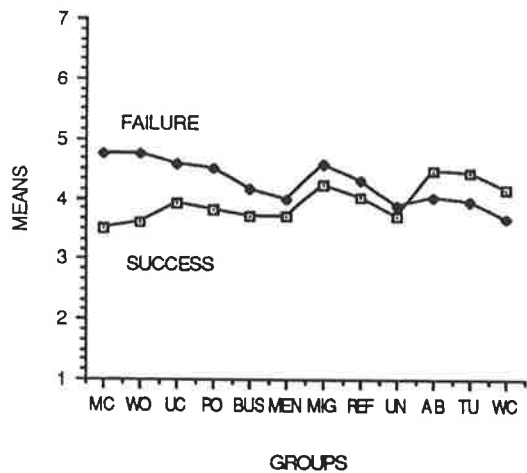
FIGURE 6.1 : Ability
Outcome x Groups Interaction
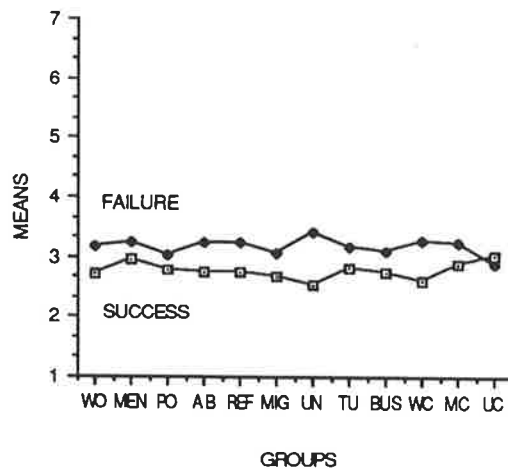
FIGURE 6.2 : Effort
Outcome Main Effect
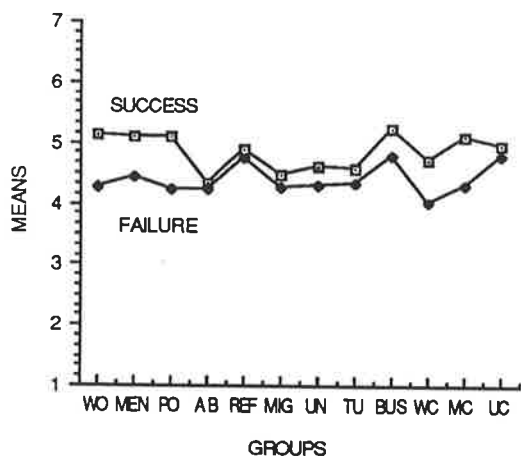
FIGURE 6.3 : Task
Outcomes & Groups Main Effects
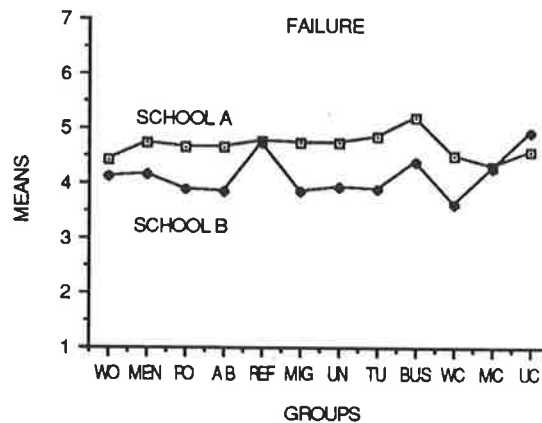
FIGURE 6.4 : Task
School x Outcome Interaction

<u>Year 12:</u>

Means and standard deviations obtained by the year 12 students on attribution ratings for the 12 stimulus groups are presented in Appendix C2. Full MANOVA tables for each analysis can be found in Appendic C3. Significant results are again presented in graphic form.

Ability:

A significant outcome main effect (Figure 6.5: $F = 11.37$, df = 1, 32, $p < 0.01$) emerged, where success was attributed more to ability than was failure. This was qualified by a school x outcome interaction (Figure 6.5: $F = 5.74$, df = 1, 32, $p < 0.05$), where students from school B attributed failure more to lack of ability than did students from school A.

Effort:

As with the year 9 students, an outcome main effect indicated that success was attributed more to effort than was failure (Figure 6.6: $F = 5.27$, df = 1, 32, $p < 0.05$).

Task:

A schools main effect emerged. School B students were more likely to make task attributions for success and failure in exams than were school A students (Figure 6.7: $F = 9.79$, df = 1, 32, $p < 0.01$). An outcome main effect indicated that failure is attributed more to the task (difficulty) than is success (Figure 6.7: $F = 6.37$, df = 1, 32, $p < 0.05$).

Luck:

A stimulus groups main effect emerged (Figure 6.8: $F = 1.89$, df = 11, 352, $p < 0.05$). Success and failure were more likely to be attributed to luck for the groups aborigines and unemployed. A school x groups interaction (Figure 6.8: $F = 2.31$, df = 1, 352, $p < 0.01$) indicated that school B students were more likely to endorse luck attributions for stimulus groups, politicians, refugees, trade unions and middle class than were students from school A.

Confidence Ratings:

No significant findings emerged.
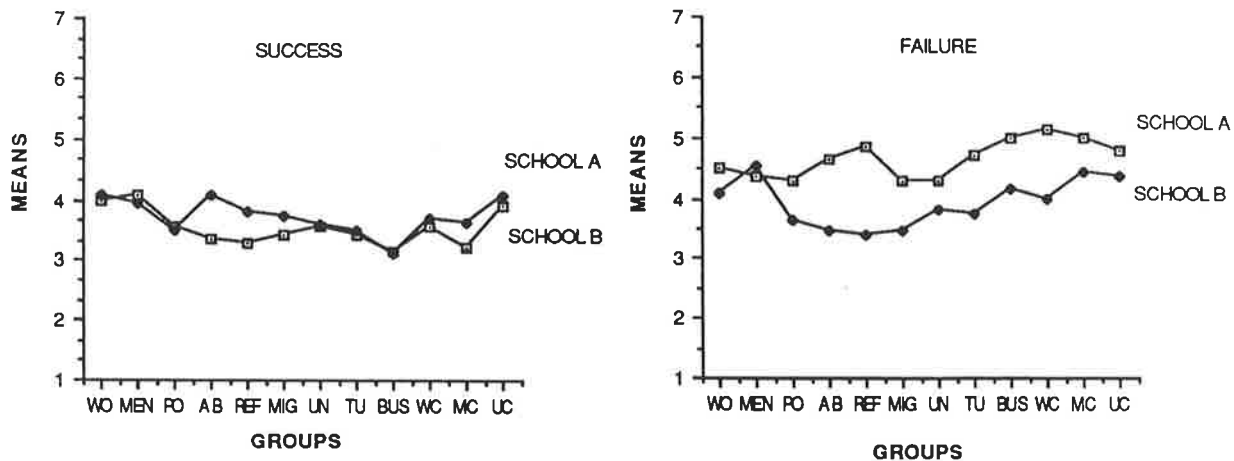
FIGURE 6.5 : Ability - Outcome Main Effect, School x Outcome Interaction
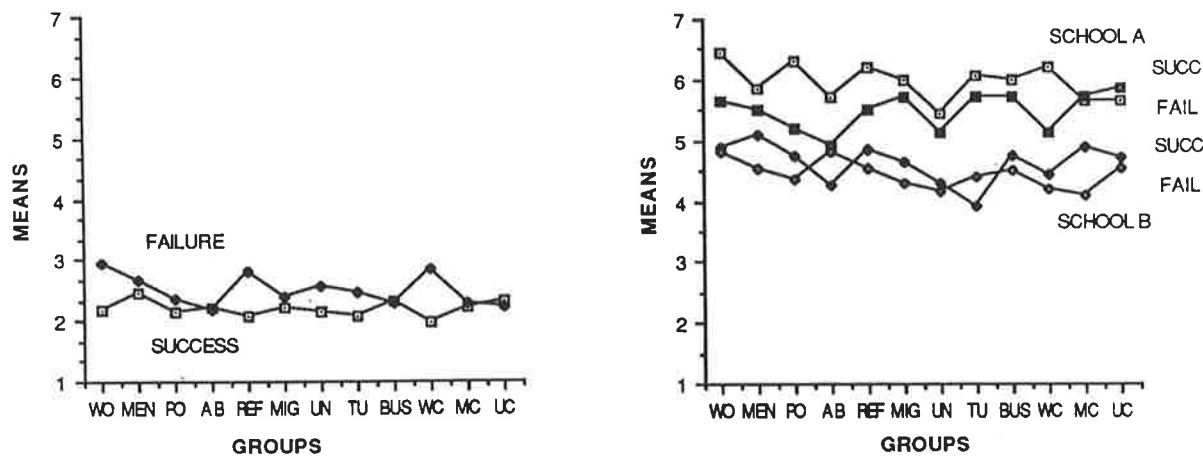
FIGURE 6.6 : Effort - Outcome Main Effect

FIGURE 6.7 : Task - School Main Effect Outcome Main Effect
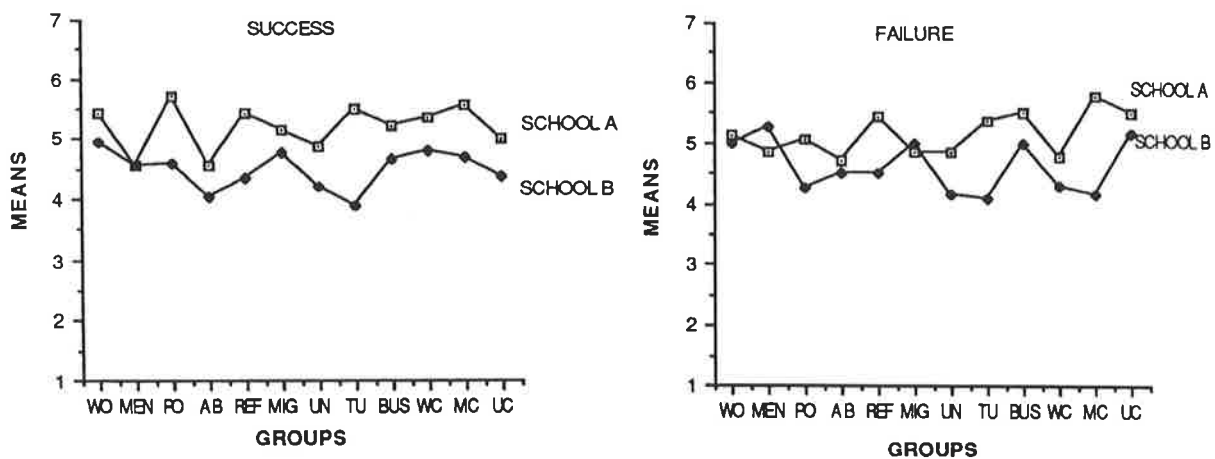
FIGURE 6.8 : Luck - Group Main Effect, School x Groups Interaction
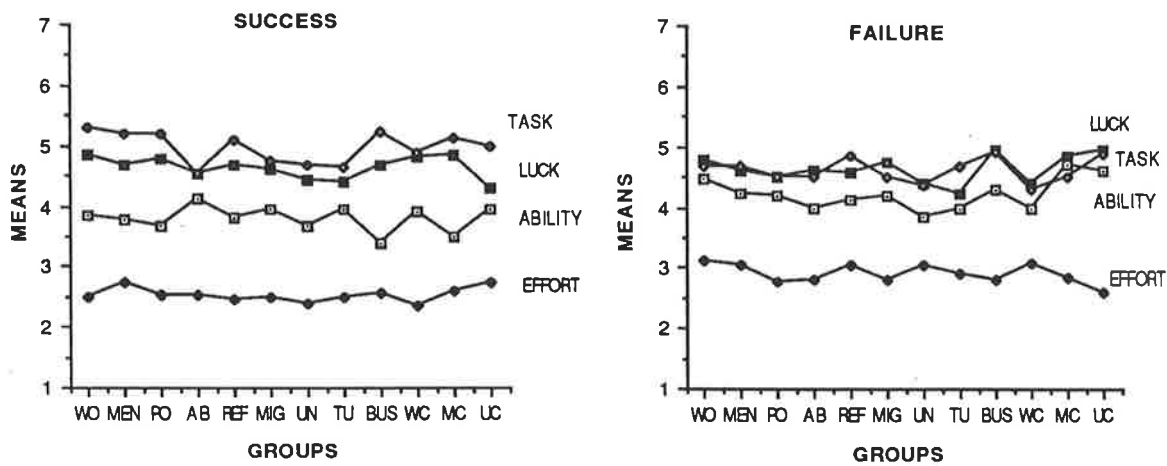
FIGURE 6.9 : Attribution Main Effect

<u>Attribution and Age Effects:</u>

To test the last hypotheses, that internal attributions would be preferred over external attributions and that this effect would be more pronounced in the older students, separate analyses of variance with repeated measures design were undertaken, Age (2) x Attributions (4) x Stimulus Categories (12), for the success and failure outcomes.

As expected, a highly significant main effect for attributions was found (Fig 6.9: F = 68.20, df =3, 234, p < .0001) for the success outcome. Effort attributions were significantly most preferred, then ability attributions and, lastly, luck and task attributions, with minimal difference between the latter two. For the failure outcome (Fig 6.9: F = 37.93, df =3, 222, p < .0001), again, effort attributions were significantly more preferred over ability, luck and task attributions, with only small differences distinguishing the latter three.

Also, as expected, a significant age x attribution interaction was found, but only for the failure outcome (F = 3.87, df =3, 222, p = .01). There was a similar but non significant tendency for the success outcome (F = 2.59, df = 3, 234, p = .053). In particular, effort (internal) attributions for success and failure were more strongly maintained by the older students (Fig 6.10), whereas the younger students tended to endorse task (external) attributions more than did the older students (Fig 6.11).

Further analyses of the data will seek to combine the stimulus groups together in a 'meaningful' way, to throw possible further light on the attribution process.
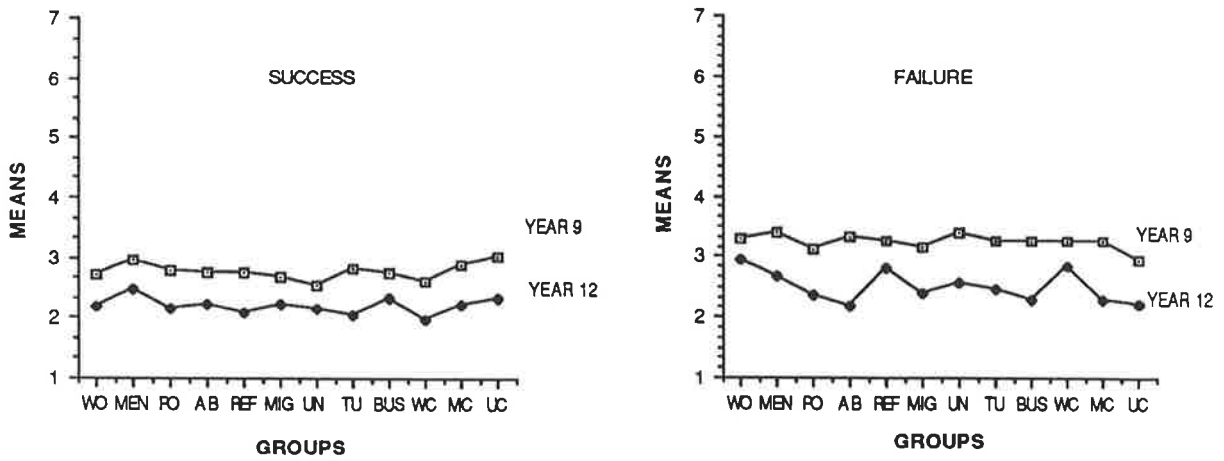
FIGURE 6.10 : Age x Attribution Interaction
Effort Attributions
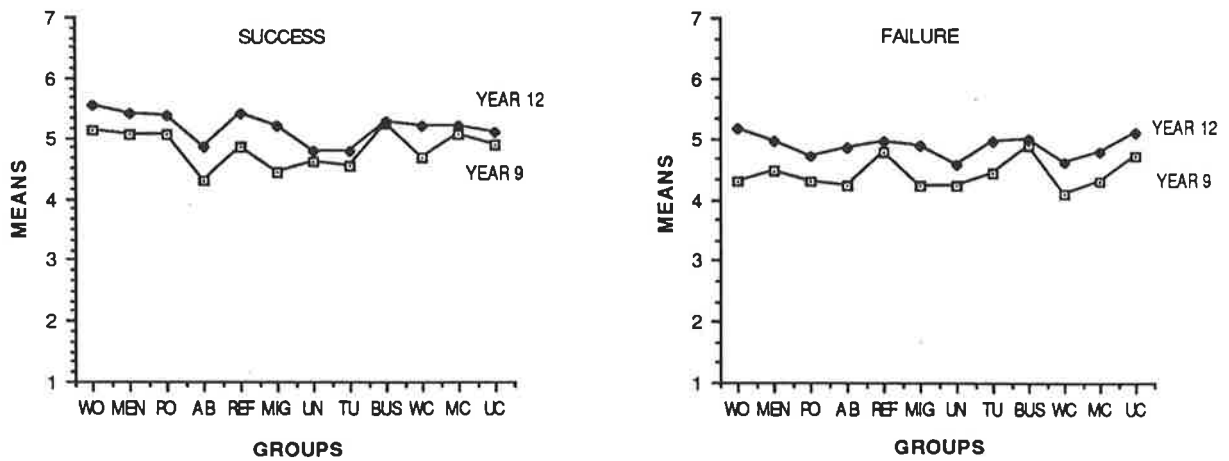
FIGURE 6.11 : Age x Attribution Interaction
Task Attributions

Attributions of Success and Failure: Ingroup vs Outgroup:

Hewstone Jaspars & Lalljee's (1982) study stems from a body of research which has focused on differential patterns of intergroup attributions made for socially desirable and undesirable events and achievement outcomes. This research has generally found intergroup attributions to be supportive and self-serving of the ingroup and derogating to the outgroup. In one of the earliest studies, Taylor & Jaggi (1974) found that subjects were more likely to make internal attributions for ingroup members performing socially desirable acts, but external attributions for socially undesirable acts. However, in the case of outgroups, socially desirable acts were seen as externally caused and undesirable acts as internally caused. These kinds of attributions are derogating of the outgroup and self-protecting or enhancing of the ingroup. Pettigrew (1979) extended this group-serving principle and termed it 'the ultimate attribution error': the tendency for prejudice or ethnocentric attitudes towards the outgroup to influence attributions made for their behaviour. Based on the 'fundamental attribution error' (Ross, 1977), it refers to the tendency to overrate dispositional factors at the expense of situational factors for the behaviour of an outgroup actor. Negative behaviour was attributed to internal causes, to innate and personal characteristics of the group, whereas positive behaviour of an outgroup member was seen as arising from the uncharacteristic and exceptional nature and circumstances of the individual compared to others in the group, to luck, and/ or to high motivation and effort. This literature suggests that the stereotypes, beliefs or 'representations' of various groups within society influence the kinds of attributions made for their behaviour. The way the group is defined and evaluated (represented) is therefore a powerful mediating factor in causal attributions for their behaviour, both positive and negative.

Following Pettigrew's (1979) predictions and, more generally, research in interpersonal attribution, intergroup attributions which are ingroup-serving and outgroup-derogating should conform to the following pattern of attributions (see Table 6.1). Ingroup success is likely to be attributed to ability (an internal attribution) which is supportive of the ingroup. On the other hand, outgroup success can be explained away by attributions of good luck and ease of the task, both external attributions and derogating of the outgroup. Outgroup success

can also be attributed to effort, an internal attribution like ability, but different in its implications in that such success can be explained away by the high effort and motivation of an uncharacteristic outgroup member. Ingroup failure is likely to be attributed to external causes such as bad luck and difficulty of the task, both of which serve to protect the ingroup. Paradoxically, lack of effort as an internal attribution can also be implicated in ingroup failure. However, in this context, such an attribution is group-serving in the sense that failure is seen to be due to lack of effort and future success is achievable if motivation and effort is increased. Finally, outgroup failure is likely to be attributed to the lack of ability, a clear contrast to ingroup success which is seen as primarily based on ability (Hewstone, 1989; 1990).

Further analyses of the data yielded by the present study will explore whether this general pattern of intergroup attributions holds true for this sample of adolescent students. Consistent with the spatial configuration of some of the MDS analyses in Chapters 3 and 4, the original 12 stimulus groups were combined and then averaged to form two major groups of comparison: an 'outgroup' versus an 'ingroup'. Reducing the groups in this way allowed for comparisons to be made with previous research literature dealing with attributions for success and failure for outgroups and ingroups.This data analysis will also facilitate the interpretation of any significant group main effects and interactions reported above, which resulted from the analyses using the original 12 stimulus groups.

Data Analysis:

In accordance with the previous MDS results, the stimulus groups women, men, politicians, trade unions, big business, working class, middle class and upper class, were combined and averaged to form the 'ingroup'; and the groups aborigines, refugees, migrants and unemployed were combined and averaged to form the 'outgroup'. The original 12 groups were also further combined and averaged, forming three major groups of comparison, consistent with the three major clusters of groups yielded by the MDS and cluster analyses in Chapters 3 and 4. The groups women, men, trade unions, middle class and working class were combined and averaged to form cluster 1; aborigines, refugees,

migrants and unemployed formed cluster 2; and politicians, big business and upper class combined and averaged to produce cluster 3. Analyses using the 2 and 3 group comparisons are invoked whenever a significant group main effect or interaction emerged for the original 12 group analysis.

Results:

Year 9

While the 12 groups analysis yielded a significant outcome x groups interaction for ability attributions, reducing the 12 groups into the aforementioned 3 and 2 groups for comparison did not produce significant group main effects or interactions. For task attributions, the previous 12 groups analysis produced a significant groups main effect. The 3 group comparison also yielded a significant group main effect (F =5.35, df =2, 90, p <.01). Students were most likely to attribute success and failure to the task for groups in cluster 2 (success M = 4.58, failure M = 4.38) and least likely to make task attributions for groups in cluster 3 (success M = 5.09, failure M = 4.59). The more simplified ingroup vs outgroup analysis did not reach statistical significance (F = 3.62, df = 1, 45, p =.064). The significant school x outcome x groups interaction in the previous 12 groups analysis for luck attributions was also found in the 3 group analysis (F = 3.48, df = 2, 84, p <.05). School B students were more likely to attribute failure to luck for groups in clusters 1 (M = 4.18) and 2 (M = 4.14) than were students from School A (group 1, M = 4.65, group 2, M = 4.87). The schools showed only small differences in luck attributions for failure for group 3 (school A M = 4.65, school B M = 4.71).

Year 12

While the 12 groups analysis for ability attributions did not yield a significant group main effect (F = 1.65, df = 11, 352, p =.084), a more simplified ingroup vs outgroup comparison (F = 9.03, df = 1, 32, p <.01) indicated that students were more likely to make ability attributions for the outgroup (success M = 3.65, failure M = 3.93) compared to the ingroup (success M = 3.67, failure M = 4.37). While the group by outcome interaction was not

significant, the significant group effect for ability attributions appears to have emerged largely from the differences in ability attributions for failure. Thus ingroup failure was less attributed to ability than was outgroup failure.The 3 group comparison was also indicative of a similar trend (F = 3.15, df = 2, 64, p =.05). Consistent with the 12 groups analysis for luck attributions, both the 3 group (F = 3.84, df = 2, 64, p <.05) and ingroup vs outgroup analyses (F = 6.48, df = 1, 32, p <.05) yielded significant groups main effects. Essentially, luck attributions were significantly more likely to be made for the outgroup (success M = 4.61, failure M = 4.71) as compared to the ingroup (success M = 4.87, failure M = 4.88). The significant school x groups interaction for luck attributions found in the 12 groups analysis did not emerge in the 3 and 2 groups analyses.

Overall Analysis:

Lastly, an overall analysis of variance was performed on all the dependent and independent variables. The overall analysis was run for the original 12 stimulus groups and the 3 group clusters but, to simplify presentation of results, only the analysis in which the 12 stimulus categories are grouped into 'ingroup' vs 'outgroup' will be presented. Thus a school (2) x age (2) x outcomes (success/failure) x attributions (5) x groups (ingroup vs outgroup) analysis is reported. All significant (p < .05) main effects and interactions are reported. It should be made clear that all the reported significant results were also significant for the 12 and 3 group analyses. Full MANOVA results for this analysis are presented in Table 6.2. Means and standard deviations for the attributional judgements can be found in Appendix C2.

Results:

First, a schools main effect emerged (F = 6.05, df = 1, 65, p <.05), indicating that students from School A were less likely to agree with the attributional statements, obtaining significantly higher means than students from School B. This is qualified by a significant school x outcome interaction (F = 9.16, df = 1, 65, p <.01) indicating that students from School A are less likely to agree with the failure attributional statements compared with the success attributional statements (see Table 6.4).

Table 6.2: Overall MANOVA, Ingroup vs Outgroup

	DF	MS	F	P
Within Cells	65	8.26		
School	1	49.97	6.05	.017
Age	1	3.35	.40	.527
School x Age	1	1.38	.17	.684
Within Cells	65	.89		
Outcome	1	1.17	1.31	.257
School x Outcome	1	8.20	9.16	.004
Age x Outcome	1	1.14	1.27	.321
School x Age x Outcome	1	1.14	1.27	.264
Within Cells	260	5.21		
Attributions	4	305.58	58.69	.000
School x Attributions	4	3.07	.59	.671
Age x Attributions	4	16.48	3.17	.015
School x Age x Attribution	4	7.99	1.53	.193
Within Cells	65	0.37		
Groups	1	1.91	5.19	.026
School x Groups	1	.01	.02	.896
Age x Groups	1	1.06	2.88	.094
School x Age x Groups	1	.04	.10	.758
Within Cells	260	1.00		
Outcome x Attributions	4	5.07	5.06	.001
School x Outcome x Attribution	4	1.43	1.43	.225
Age x Outcome x Attribution	4	0.91	.90	.462
School x Age x Outcome x Attribution	4	6.45	6.43	.000
Within Cells	65	0.35		
Outcome x Groups	1	.10	.30	.588
School x Outcome x Groups	1	.26	.73	.396
Age x Outcome x Groups	1	.07	.19	.660
School x Age x Outcome x Groups	1	.04	.11	.744
Within Cells	260	0.31		
Attribution x Groups	4	.97	3.13	.016
School x Attribution x Groups	4	.21	.67	.616
Age x Attribution x Groups	4	.71	2.29	.060
School x Age x Attribution x Groups	4	.03	.10	.984
Within Cells	260	0.54		
Outcome x Attribution x Groups	4	1.54	2.86	.024
School x Outcome x Attribution x Groups	4	.39	.71	.582
Age x Outcome x Attribution x Groups	4	.25	.47	.758
School x Age x Outcome x Attribution x Groups	4	1.77	3.29	.012

A significant attribution main effect was found (F = 58.69, df = 4, 260, p <.001), already discussed in the previous section, as well as a significant age x attribution interaction (F = 3.17, df = 4, 260, p <.05) also demonstrated above.

Table 6.3: Means & Standard Deviations for Ingroup & Outgroup, Success & Failure Attributions.

[Ms] [SDs]	Ability	Effort	Luck	Task	Confidence
Ingroup Success	3.75 1.40	2.48 1.11	4.69 1.34	5.13 1.35	5.36 1.34
Outgroup Success	3.99 1.47	2.41 1.27	4.59 1.46	4.78 1.65	5.40 1.43
Ingroup Failure	4.29 1.33	2.76 1.18	4.69 1.27	4.70 1.42	5.27 1.36
Outgroup Failure	3.98 1.58	2.84 1.47	4.54 1.53	4.55 1.61	5.32 1.45

A groups main effect (F = 5.19, df = 1, 65, p <.05) indicated that students were more likely to agree with the attributional statements for the outgroup compared to those for the ingroup. Table 6.3 indicates that, overall, the outgroup obtained consistently lower means. An outcome x attribution interaction (Table 6.3: F = 5.06, df = 4, 260, p < .01) indicated that effort attributions were more likely to be made under success conditions than under failure conditions, and that task difficulty attributions are more likely to be made under failure than under success conditions. These interactions also emerged in earlier analyses. This was qualified by a significant school x age x outcome x attributions interaction (Table 6.4: F = 6.43, df = 4, 260, p <.001). The older students from School A are more likely to make effort attributions for the success outcome and the younger students from School B are more likely to attribute failure to task difficulty. A significant attribution x groups interaction (Table 6.3:

$F = 3.13$, df = 4, 260, p <.05) indicated that students were more likely to make luck and task (external) attributions for the outgroup compared to the ingroup under both success and failure situations. Efffort attributions did not differ significantly between groups.

The attribution by groups interaction is further qualified by a significant outcome x attributions x groups interaction (Table 6.3: $F = 2.86$, df = 4, 260, p <.05). This indicated that ability attributions were more likely to be made for the ingroup compared to the outgroup under the success condition, whereas ability attributions for failure were more likely to be made for the outgroup compared to the ingroup.

Table 6.4: Means & Standard Deviations for Effort and Task Attributions by School & Age

	Effort			
[Ms] [SDs] School A	Ingroup Sucess	Ingroup Failure	Outgroup Success	Outgroup Failure
Age 1 (younger)	2.98 1.31	3.15 1.26	3.13 1.45	3.16 1.59
Age 2 (older)	2.00 0.82	2.35 1.04	1.80 0.80	2.45 1.05
School B				
Age 1 (younger)	2.55 1.08	2.89 1.16	2.35 1.28	3.18 1.67
Age 2 (older)	2.32 1.01	2.58 1.18	2.30 1.17	2.53 1.36
	Task			
School A				
Age 1 (younger)	4.76 1.77	4.85 1.60	3.88 2.08	4.83 1.73
Age 2 (older)	6.02 1.01	5.56 1.31	5.84 1.34	5.32 1.67
School B				
Age 1 (younger)	5.20 1.10	4.17 1.38	5.03 1.39	3.86 1.63
Age 2 (older)	4.70 1.12	4.48 1.12	4.49 1.25	4.49 1.19

This is, in turn, qualified by a 5-way significant interaction between schools, age, outcome, attributions and groups (Figure 6.12:$F = 3.29$, $df = 4, 260$, $p < .05$) which indicated that the younger students from School A were especially likely to make the above pattern of ability attributions. The results for School B (private school) show few differences in attributions for ingroup/outgroup success or failure. The results for School A (state school), however, show that, while attributional differences for ingroup/outgroup failure are not present, the younger students are especially likely to make ability attributions for ingroup success compared with outgroup success. The older students at this school also emphasise task factors for success as against failure, but equally so for ingroups and outgroups.
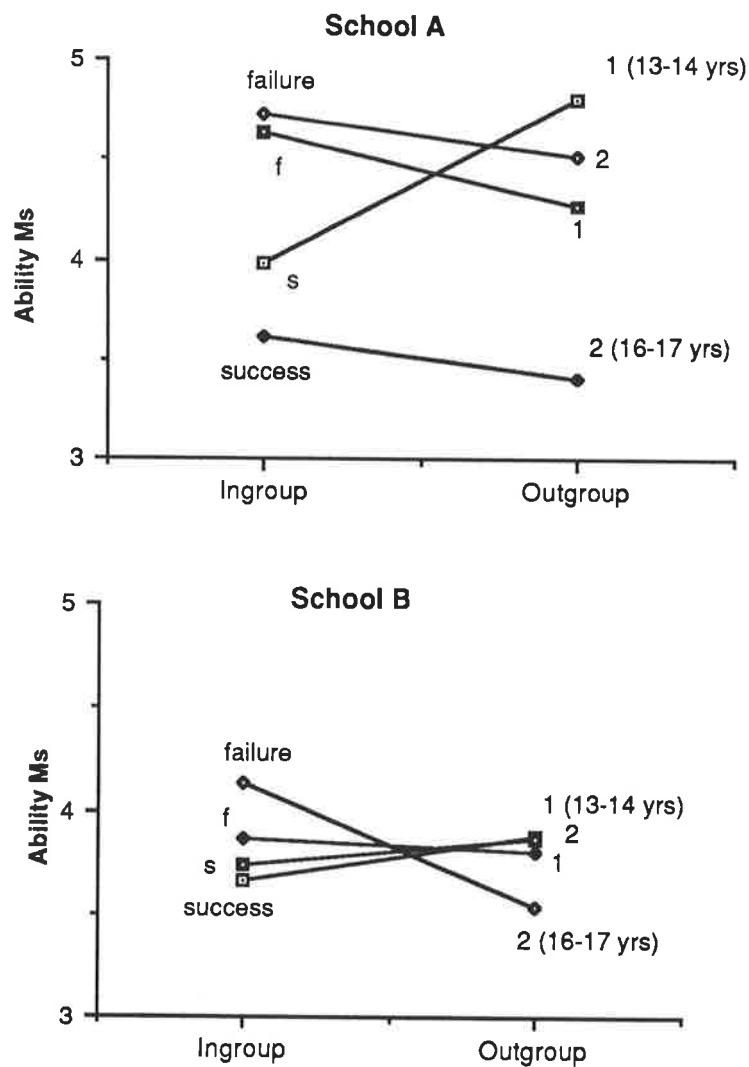
Figure 6.12: Ability x Schools x Age x Outcome x by Groups Interaction.

Correlational Structure:

In order to determine the underlying correlational structure in the attributional data, a principal components analysis was carried out on both the ingroup and outgroup data combined. In addition, separate analyses were performed for the ingroup and outgroup to see whether the correlational structure differed between them [2].

Sixteen variables were included in the correlation matrix. These comprised the ability, effort, task and luck attributions for ingroups versus outgroups, under the success and failure outcomes. A principal component analysis yielded four major factors underlying the correlational structure for the combined data set. These four factors accounted for 75.1% of the total variance. Table 6.5 provides the 4 factor solution after an oblimin rotation. The table details the eigen values associated with each factor, as well as the factor loadings greater than .40. It is clear from the table that the identified factors largely correspond to the external/internal attributional dimension identified by Weiner (1986).

The first factor is an external factor largely comprised of the luck and task attributions. The exception is for the task attribution associated with the success outcome. For both the ingroup and outgroup these combine to form factor 4. The second factor is an ability factor, and factor 3 is an effort factor. Not surprisingly, the external factor (factor 1) correlates negatively with factor 3 (-.25). Factor 1 also correlates negatively with factor 4 (-.31). Table 6.6 details the factorial structure for the separate analyses performed on the ingroup and outgroup data. As determined by the scree plot, both analyses yielded three major factors. For the ingroup, this accounted for 76.7% of the variance, and for the outgroup, 67.3% of the variance. Attributions made for the ingroup demonstrate a clear external/internal factorial structure. Factor 1 is clearly an external factor which combines both task and luck attributions for the ingroup. Factors 2 and 3 are an effort and ability factor respectively. While effort and ability are both internal attributions, they are clearly differentiated as separate factors for the ingroup. Factor 1 correlates negatively with both factor 2 (-.31) and factor 3 (-.28). Thus the external attributional factor correlates negatively with effort attributions and positively with ability attributions. We will return to the group-serving nature of this latter

Table 6.5: Factorial Structure for Combined Data Set - Oblimin Rotation.

	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalues	5.98	2.91	1.81	1.31
Percentage of Variance	37.4%	18.2%	11.3%	8.2%
FL2	.95			
FL1	.84			
SL1	.78			
FT2	.70			
FT1	.63			
SL2	.58			
SA1		.90		
SA2		.86		
FA1		.73		
FA2		.65		
FE1			.88	
SE1			.88	
FE2			.77	
SE2			.73	.41
ST2				-.83
ST1				-.75

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .74
Bartlett Test of Sphericity = 915.48, Sig = .00000
Anti-Image Correlations Ranged from .44 to .85

S = Success   A = Ability, E=Effort, L=Luck, T=Task Difficulty

F = Failure   1 = Ingroup, 2 = Outgroup

finding in the Discussion. For the outgroup, the first factor is also defined by the external attributions of luck and task difficulty. Unlike the ingroup, the second factor includes both internal attributions. Ability and effort are not differentiated as separate factors. The third factor appears to combine all four attributions. For the outgroup, success, which is attributed to easy exams, is associated with success due to good luck and failure due to low ability. Success attributed to hard work is negatively correlated with success due to luck, easy exams and low ability. Factor 1 correlates negatively with this factor (-.29).

This third factor demonstrates that the outgroup receives a much more complex correlational structure than does the ingroup. This is also reflected in the fourth factor yielded by the combined analysis. Whereas this factor was simplified above by being defined as a success/task factor for both groups, it is clear that attributions made for the outgroup dominate factor 4. For the outgroup, success due to an easy exam is associated positively with failure due to low ability, and negatively with success due to hard work and high ability. In comparison, the ingroup's factorial structure is more differentiated and clearly distinguishes attributions in terms of their internality and externality. Ability and effort are differentiated as separate factors for the ingroup, but combine to form a single factor for the outgroup.

Table 6.6: Factorial Structure for Ingroup and Outgroup Separately - Oblimin Rotation.

Ingroup

	Factor 1	Factor 2	Factor 3
Eigenvalues	3.42	1.68	1.03
Percentage of Variance	42.8%	21.1%	12.9%
FT	.82		
FL	.81		
SL	.80		
ST	.79		
FE		.93	
SE		.90	
SA			-.92
FA			-.78

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .67
Bartlett Test of Sphericity = 279.43, Sig = .00000
Anti-Image Correlations Ranged from .56 to .78

Outgroup

	Factor 1	Factor 2	Factor 3
Eigenvalues	2.81	1.43	1.14
Percentage of Variance	35.2%	17.8%	14.3%
FL	.92		
FT	.80		
SL	.46		-.49
ST	.41		-.79
SA		.76	
FE		.59	
FA		.48	-.70
SE		.35	.76

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .58
Bartlett Test of Sphericity = 172.05, Sig = .00000
Anti-Image Correlations Ranged from .42 to .71

S = Success   A = Ability, E = Effort, T = Task, L = Luck
F = Failure

Discussion:

<u>Comparisons with Hewstone, Jaspars & Lalljee's study:</u>

There are several findings in the present study which replicate and extend findings by Hewstone et al (1982). Firstly, both Hewstone et al's students and the present year 12 students who are comparable in age, were more likely to attribute success than failure to ability. Ability, therefore, seems to be a socialised and readily used explanation for success. However, whereas students from lower socioeconomic backgrounds (CS schoolboys) in Hewstone et al's study were more likely to make ability attributions than were PS schoolboys, in the present study, year 12 students from higher socioeconomic backgrounds (school B) were more likely to make ability attributions than were school A students, but only for the failure outcome. Thus students from higher socioeconomic backgrounds were more likely to explain failure in terms of lacking ability.

In both studies, success was attributed more to effort than failure. Again, an internal attribution like hard work and effort appears to be a highly socialised and readily available explanation for success. Whereas Hewstone et al found significant stimulus group effects and school x outcome and stimuli x outcome interactions, this was not found in the present study. In fact, of all the attributions, there were least stimulus group differences for effort attributions. This is an interesting finding suggesting that, regardless of the category membership or background of the stimulus in the vignette descriptions, students believed that hard work was instrumental in success and lack of hard work and effort was instrumental in failure. This further supports the last hypothesis of the dominance of individualist explanations for success and failure.

In the present study, luck attributions were more likely to be made for the most deprived and disadvantaged of the social categories: aborigines and the unemployed. Since notions of luck vary, it is difficult discerning clearly what the sample meant by luck. Given the external, unstable and uncontrollable nature of the notion of luck, it is likely that these two groups, more than any others in society, were perceived as being less in control and more subject to external and unstable events. Hewstone et al's finding that luck featured as a prominent

explanation used by CS boys to account for PS boys' success, suggests that luck was used in a different context, in this case referring to the educational and social advantages of attending a public school or being a member of a higher social class. While class membership has external and uncontrollable properties, it is also mostly stable, highlighting the importance of all three of Weiner's (1986) attributional dimensions.

In Hewstone et al's study, and for both age groups in the present study, failure was attributed more to the task (difficulty) than was success. This suggests that people are more likely to evoke explanations referring to the relative difficulty of a task under situations of failure. This finding, along with the significant tendency for students to attribute success rather than failure to ability and effort, supports the often found 'self-serving bias' in attribution research: a tendency to attribute success to internal factors and failure to external factors (Ross, 1977).

Again, this time amongst the year 9 students, task attributions were most likely to be made for aborigines and the unemployed. As with luck attributions, the relative difficulty of an exam would be viewed as an external and somewhat uncontrollable event, and these two groups were perceived as being more subject to such external and uncontrollable forces. The success and failure of groups from the higher end of the socioeconomic structure, such as big business, middle class and upper class, was seen to be least affected by the relative difficulty of the task. Instead, success for these groups was most likely to be explained in terms of ability - of being naturally bright and intelligent. Failure for aborigines and the working class was viewed as being due to their lacking ability. This is somewhat similar to Hewstone et al's finding of a genetic ideology, explaining the success of groups at the higher end of the socioeconomic spectrum and the failure of groups at the lower end. However, whereas these authors found this ideology to be present only amongst students from privileged backgrounds, there were no school differences in the present study, suggesting it was an ideology shared by students across the socioeconomic spectrum. Thus, while the present study was able to show how the representations of different groups in society can influence attributions made for success and failure, unlike Hewstone et al's findings, there were few school differences.

Perhaps one reason for this is in the choice of stimulus categories used in the two studies. Hewstone et al used two stimulus categories that were directly and deliberately representative of the students themselves, whereas the present study used 12 stimulus groups, of which some were not directly related to the students. This made it possible for Hewstone et al to investigate the role of social identity in attributions, since the students were able to identify directly with the categories. The use of these two categories would have also created a situation not unlike a Tajfelian (1978) minimal group differentiation situation, with clearly defined social boundaries of 'us' and 'them', making school differences in attribution more likely. Unfortunately, data were not collected indicating with which of the social groups students in the present study identified, thus making it difficult to unravel the possible link between identification with the categories and its effect on attributions.

Comparisons with Outgroups vs Ingroups Literature:

Recently, Hewstone (1989, 1990) reviewed ten studies which explored the pattern of intergroup attributions in achievement contexts and found some evidence, although limited, for the hypothesised pattern of attributions for outgroups and ingroups based on Pettigrew's model [3]. While some studies failed to show any significant group effects (Ho & Lloyd, 1983; Stephan & Woolridge, 1977), most studies found effects limited to specific attributions. The most consistent effect found across studies was attributions of failure to ability (Deaux & Emswiller, 1974; Feather & Simon, 1975; Feldman-Summers & Kiesler, 1974; Greenberg & Rosenfield, 1979; Hewstone, Jaspars & Lalljee, 1982; Whitehead, Smith & Eichhorn, 1982; Yarkin, Town & Wallston, 1982). In this context, outgroup failure was attributed more to lack of ability than was ingroup failure. This is certainly consistent with the findings of the present study. The overall analysis indicated a significant outcome x groups interaction for ability attributions. Overall, the students in this study were more likely to make ability attributions for the ingroup compared to the outgroup under the success condition, but were also more likely to attribute failure to lack of ability for the outgroup compared to the ingroup. However, this interaction is qualified by its being particularly strong amongst the younger students from School A.

Comparing the present findings with the rest of the predictions detailed in Table 6.1, it is clear that only some of these patterns of attributions were found in the present study. As already mentioned, no differences were observed for effort attributions between the groups. While it is predicted that outgroup success would be attributed to luck and task difficulty, the present study found luck and task attributions were made for the outgroup under both conditions of success and failure. Thus the outgroup was perceived to be at the mercy of external and uncontrollable forces, whether they succeeded or failed. Ingroup failure was not significantly more likely to be attributed to bad luck, difficulty of the task or lack of effort. Indeed, the three cluster group analysis showed that for year 9 students from School B failure was least likely to be attributed to bad luck for the ingroups at the top of the socioeconomic hierarchy.

The principal components analyses also produced limited support for ingroup-serving attributions. Differences in correlational structure between the groups indicate a number of important differences, some of which were detailed previously. The negative correlation between factors 1 and 3 for the ingroup analysis is particularly noteworthy. An examination of the intercorrelation matrices for the ingroup and outgroup suggest that, amongst the ingroup, ability attributions are associated with task attributions for failure (SA & FT = 0.28, $p < .001$; FA & FT = 0.46, $p < .0001$). For the outgroup, SA and FT were not significantly correlated; FA and FT attributions were correlated (0.30, $p < .001$).Thus, if an ingroup member's success is attributed to ability, then his or her failure is likely to be associated with task difficulty. One can appreciate the group-serving nature of this association. Failure for an ingroup member is sometimes seen as a result of the nature of the task itself, and not always attributed to the inherent capacities of the individual. This is not the case for the outgroup, where ability attributions for success are positively associated only with ability attributions for failure. However, the students also made attributions which were supportive of the outgroup. For example, the third factor in the outgroup principal component analysis indicates that effort attributions for success are negatively related to ability attributions for failure. An outgroup member whose success is attributed to hard work is less likely to be viewed as lacking ability under failure.

Consistent with Hewstone's (1989, 1990) review of the literature on outgroup and ingroup attributions for achievement outcomes, the present study lends only limited support to the hypothesised pattern of attributions detailed in Table 6.1. The only attribution which was ingroup-serving and outgroup-derogating was for ability attributions, and this was particularly strong only amongst the younger students from School A. Thus different attributions are made for different groups in society, which may not always be ingroup-serving or outgroup-derogating. A further interesting pattern of results previously referred to in the present study suggests that external attributions such as luck and task difficulty are more likely to be made for the outgroup. Thus outgroup members are more likely to be seen as at the mercy of uncontrollable and unstable forces, a view which may certainly reflect a pervasive reality. Indeed, such a view may be based on a representation of outgroup members as lacking personal control and being overwhelmed by the fortunes of circumstance.

The outgroup/ingroup distinction used in the present study, whilst based on the spatial representation yielded by the previous MDS analyses, is, however, only a post hoc interpretation. While the limited support found for Pettigrew's predictions provides some external validation for the ingroup versus outgroup distinction between the groups, this distinction would need to be evaluated more definitively before any reliable conclusions could be drawn. Indeed, in most of the studies Hewstone (1989, 1990) reviews, subjects are divided into high and low in ethnocentrism towards the outgroup. The predicted pattern of attributions which are ingroup-serving and outgroup-derogating are more likely for subjects high on ethnocentrism towards the targeted outgroup. Subjects in the present research are treated undifferentially as regards their attitudes towards the groups. Further, group-serving attributions are more likely to be accentuated when the targeted groups have long histories of intergroup conflict, and particularly when the outgroup is perceived in a negative stereotypical way. The four groups which combine to form the outgroup (aborigines, unemployed, migrants, refugees) may certainly possess some of these features. In the previous MDS study, aborigines and the unemployed were the groups most described on the attribute rating scales as foolish, unsuccessful, lazy, disrespectful of authority, uneducated,

and the least likely of all the groups to strive for success. In the present study's context of academic success and failure, it would not be surprising if these evaluations combine to influence attributions for success and failure. To some extent, however, this influence may be moderated, since intergroup conflict is not commonly perceived and treated as a salient and endemic problem in the Australian political and social context.

Individualism and Causal Attributions.

The strong endorsement of internal explanations, particularly effort attributions over external explanations, and the tendency for these to increase with age, demonstrates the pervasiveness and sharedness of individualist explanations. While the present study lacks a cultural comparative analysis, it does support Miller's (1984) developmental findings within a western culture for internal dispositional attributions to increase with age.

The individualist ethos has become an integral part of everyday concepts and notions, particularly those relating to success and failure, merit and blame, and responsibility (Moscovici & Hewstone, 1983). Although future research needs to extrapolate more clearly what constitutes 'the representation of the person', it would appear from the present study that the individualist ethos or the individualist representation of the person forms the foundation from which explanations for success and failure are made.The social representation of the person as a primary causative and autonomous agent gives rise to automatic dispositionalist or personal explanations, such as 'hard work' and 'ability', to account for success. It is unlikely that people engage in exhaustive cognitive attributional activity to arrive at these explanations. Rather, our culture already provides for us these 'ready made', consensually sanctioned explanations to use. Of course, such cultural explanations may account for the prevalence of 'victim blaming' in western industrialised societies, especially in relation to explanations for poverty and unemployment. Although external explanations for success and failure were more likely to be made for disadvantaged categories of people than for those at the higher end of the socioeconomic scale in the present study, this was qualified by an overwhelming preference for dispositionalist explanations for all the stimulus categories. Thus, any attempts to alter the attributions and perceptions of

members of particular groups or classes in society, for the purpose of social change, clearly need to take account of the broader social views that contribute to any single social judgement. Emphasis upon individuals to bring about social change, while ignoring social representations, may only hamper any intervention.

Footnotes:

1. Some of the empirical research described in this chapter has appeared in the following:

Augoustinos, M. (1989). Social representations and causal attributions. In J. Forgas & J. M. Innes (eds). Recent Advances in Social Psychology: An International Perspective. North Holland: Elsevier (see Appendix E).

Augoustinos, M. (1990). The mediating role of representations on causal attributions in the social world. Social Behaviour, 5, 49-62 (see Appendix E).

2. To determine school differences in factorial structure, principal component analyses were also performed separately on the combined ingroup and outgroup data for schools A and B. It is not reported in the main text, given that there is an insufficient number of cases to variables (School A: 37 subjects to 16 variables; School B: 46 subjects to 16 variables) to allow for a reliable factorial analysis. Nevertheless, few school differences emerged in factorial structure. School A's data yielded 4 main factors accounting for 81.8% of the variance, and School B's data yielded 5 main factors accounting for 77.8% of the variance. For School A, the factorial structure corresponded remarkably to the 4 major attributions used in this study. Factor 1 was a luck factor, factor 2 an effort factor, factor 3 an ability factor, and factor 4 a task factor. For School B, the first 3 factors were the same as for School A. Task attributions made up the last two factors, factor 4 being a task/success factor, and factor 5, a task/failure factor. Both solutions were subject to a varimax rotation.

3. Hewstone also reviews the literature pertaining to intergroup attributions for positive and negative outcomes, and intergroup explanations for the existence of group differences within society. In the context of the present research, only intergroup attributions in achievement contexts will be reviewed.

Chapter 7

'Celebration of a Nation': Social Representations of the Australian Bicentenary.

Introduction:

Thus far, this thesis has concerned itself with the development of representations of the structure of Australian society via respondents' comparisons and judgements of different social groups. The previous chapter extended this analysis by considering how attributions of academic success and failure are influenced by the representations people have of the actor's social group membership and background. The present chapter extends the analysis of representations of Australian society and its constituent social groups in an analytically distinct but related way. It attempts to analyse a public and popular representation of Australian society which was disseminated widely in the mass media during 1987, in the lead-up to Australia's Bicentennial birthday celebrations on 26 January, 1988. Methodologically, it seeks to analyse the content of not only the representations 'in the minds' of individuals but also of a representation which existed 'out there' in the public and collective domain (Moscovici, 1985).

Australian intellectuals and overseas observers have demonstrated a keen interest in the Australian national character and Australia's political culture. Australians have been described invariably as possessing a distinctive ethos, as being pragmatic and utilitarian. Outside observers have marvelled at the seemingly successful adoption and translation of liberal economic doctrines in Australian political, economic and social life, without the accompanying problems of transition which were experienced in other western countries. Australia appeared to be a successful experiment in capitalism with seemingly few social conflicts and inequities. Australia has often been described as a classless society in which mateship and egalitarian values predominate. Tim Rowse summarises this view thus:

"What they thought they saw was a society that lacked some social patterns essential to the Old World. Rigid social stratification and the entrenched habits of deference and authority that went with them seemed to have little place. True, there were social differences between classes but to the visiting observers these distinctions had an air of impermanence, as if no person grew up with a limited expectation about his or her chances in life. There seemed to be an extreme degree of social mobility: fortunes were made and lost with great ease and money counted for much more as a measure of success and status. Political leadership was not the prerogative of a defined cultural establishment; it was in the hands of people who had proved their competence to their own generation, and who did not necessarily bring with them the weight of traditional cultural authority. This picture was an exaggeration made possible by the tendency to

compare Australia with Britain. Australia, wrote Sir Charles Dilke in 1890, was 'Britain with the upper class left out'. (Rowse, 1978a, p. 5).

This picture of Australian life and people has dominated from the late 1800s to the present day, without critical reference to historical and political events which may have influenced significantly Australia's political culture and the 'national character' of the Australian people. This view of Australia has been nurtured further by the dominant liberalist framework in political science (Rowse, 1978b). The strength of this view, argues Rowse, is its very diversity and flexibility to explain and take account of a range of political inflections from conservative to conciliatory and reformist . Contrary to this apparent flexibility, however, liberalism, in fact, embraces a particular institutional and social ordering of society. For example, liberalism promotes a view that society is composed of a collection of atomistic individuals. An individual's membership of any social group or class is regarded as secondary to his or her membership of the total society. The fundamental imperative is that the individual's values and goals need to be consistent with the collective goals of that society. This presents an overall picture of the moral and social unity of a society, ignoring social divisions and conflicts of interest that may be based on group or class loyalties.

The moral and social unity of Australian society is also reflected in nationalist sentiment. The representations which people have of their country or nation are particularly rich for analysis from a social representations perspective. These representations are likely to be rich with symbolic content and this content is likely to be shared extensively among many people.

The opportunity to investigate public expressions of nationalist sentiment was presented during the lead-up to the 1988 Australian Bicentenary. Organisers of the Bicentenary encouraged people enthusiastically to celebrate Australia's birthday. However, there existed considerable controversy surrounding the celebrations. Particularly salient were Aboriginal objections to the event. The history of Black Australia is infinitely longer than the 200 years of white settlement which the Bicentenary represented. Furthermore, Aboriginal perceptions of white colonisation were not of a positive celebratory nature, but for them represented the violence and associated subjugation of their people.

The Australian Bicentenary:

Australia Day is celebrated each year on 26 January, commemorating the landing of the First Fleet at Sydney Cove in 1788. On 26 January, 1988 Australia celebrated its 200 years of permanent white settlement since that landing with a spectacular day of official events and activities centred around Sydney Harbour. The press estimated that 2 million people had gathered around Sydney's foreshore to take part in what one newspaper called Australia's "Ultimate Party". The all-day events and festivities were televised nationally so that the rest of Australia could share in the exuberance displayed by the Sydney crowd. Despite criticisms that the festivities were largely concentrated in Sydney, over the course of 1988 approximately 24,000 Bicentenary events took place around Australia. O'Brien (1991), in his book, 'The Bicentennial Affair', referred to the celebrations as the "largest, longest and costliest celebrations in [Australia's] history" (p. x).

The establishment of the Australian Bicentenary Authority (ABA) was announced in Federal Parliament by Prime Minister Malcolm Fraser in April, 1979. As an organisation, the ABA was to be an independent and autonomous body, its initial primary purpose being to set the objectives and goals of this historical event. Thereafter, the ABA would be entrusted to plan and co-ordinate the program for the Bicentenary. At the outset, and during the first three years of its operation, the ABA's goals and objectives were strongly influenced by the bipartisan philosophical and idealistic rhetoric reflected in the following passages by the Prime Minister and the Leader of the Opposition (Bill Hayden) respectively:

> "Deep in any human community is a consciousness of its origins and identity and its hopes and resolutions for the future - a consciousness to which it will want to return and dwell upon at particular moments in its history. The marking of a Bicentenary is one such time. It will be a time for calling to mind the achievements throughout this country and by its people over two centuries. It will be a time to reflect upon our developing and changing national identity as a united community transformed in a remarkable way by the migration programs since World War II. It will be a time for weighing the opportunities and the challenges that lie ahead as Australia approaches the year 2000 and beyond, and for considering our place in the wider world community". (Malcolm Fraser, 5 April, 1979, cited in O'Brien, 1991, pp. 20-21).

" . . . There are far more things to unite the people of this nation than there are to divide them. The Bicentenary is a fitting occasion on which to emphasise those factors - the positive and unifying elements of our community . . . This land has moulded the national character into a style and a resilience which all of us recognise though few are able to express it satisfactorily. If our Bicentenary commemoration can capture a little of this spirit it will be a signal achievement". (Bill Hayden, 5 April, 1979, cited in O'Brien, 1991, p. 21).

The Chairman of the Board, John Reid, and the ABA's General Manager, David Armstrong, were keen to make the Bicentenary not only a time for celebration but also a time of critical reflection about Australia's past and future. They did not want to romanticise Australia's history and insisted that the Bicentenary should address serious social problems which confront Austrralia, such as Aboriginal dispossession, racism and poverty. During its early meetings the Board decided to focus the Bicentenary around the theme of multiculturalism. The catch phrase 'Living Together' was decided upon as the core Bicentenary theme. Multicuturalism as a theme was consistent with the ABA's major objective of making the Bicentenary a time for reflecting upon and defining Australia's national identity. This was clearly stated by David Armstrong,

"The task should be to create a greater self-awareness of what makes up the diversity and richness and character of our national life. As a consequence of this increased knowledge and awareness, we should aim for a better understanding of how this diversity is fused into one nation, one people, one flag. . . " (cited in O'Brien, 1991, p. 35).

However, in December 1981 the Prime Minister, without consulting the ABA, changed the theme of the Bicentenary from 'Living Together', which he later described as being "inadequate, hollow and a little bit pathetic" (cited in O'Brien, 1991, p.49), to 'The Australian Achievement'. This government interference with what supposedly was an autonomous and independent body threw the ABA into turmoil. It was the first indication that governments would dampen the idealistic and visionary objectives of the ABA and quell its attempts to make the Bicentenary something more than a spectacle of fireworks and good times.

The change to a Labor government, led by Bob Hawke in 1983, created further uncertainties within the ABA, although there was never any doubt about the new government's commitment to the Bicentenary. Like the ABA, the new government was not fond of the theme imposed by the previous Prime Minister and resurrected the 'Living Together' theme.

In 1985, the ABA experienced a barrage of public and media criticism which subsequently led to further government intervention. It began with an article written by Dr Ken Baker and published in the Institute of Public Affairs' journal, *Review*. The article was entitled 'The Bicentenary: Celebration or Apology?', in which he criticised the ABA for failing to emphasise Australia's British heritage and traditional values. Indeed, Baker and others on the political right argued that the ABA's objectives were paramount to promoting 'white guilt' over the Aboriginal issue. Baker's critique was followed by an article called 'The Bicentenary Fiasco', written by journalist Alan Ramsey, in which he alleged there was massive overspending by the Authority. Tensions were also emerging within the ABA itself. One of its board members resigned, after which he accused the Authority of "waste, extravagance, centralised administration and overstaffing" (cited in O'Brien, 1991, p. 80). These combined attacks on the ABA attracted considerable media attention, most of which criticised the ABA and its efforts to stage the Bicentenary.

Further controversy was to follow in August 1985. In a private meeting with John Reid, the Chairman of the Board, Prime Minister Hawke demanded that Reid ask for Armstrong's resignation as General Manager of the ABA. A month later, Reid himself was forced to resign through government pressure. This latter 'sacking' was triggered by the issue of Armstrong's resignation pay-out which amounted to half a million dollars. Hawke and his government claimed that the settlement was structured in such a way as to minimise Armstrong's tax liability. Reid's resignation was preceded by daily media attention over the disclosure of Armstrong's settlement. This series of events resulted in the ABA's experiencing a serious credibility problem (O'Brien, 1991).

In November, James Frank Kirk was appointed as Chairman and Chief Executive Officer of the ABA. According to O'Brien, Kirk took over an organisation "which seemed to have become overwhelmed by its aspirations, caught up in the hazards of unreal expectations, drawn into policies beginning to generate community ill will, and saddled with too many self-imposed tasks" (1991, p.110). With only two years to go, Kirk concentrated on the practical tasks required to stage all the programmed activities and events for the Bicentenary year.

Unlike his predecessors, he did not see the ABA's role as a revolutionary vanguard for social change.

According to O'Brien, the ABA began to redeem itself with media and business groups in March 1986, when it announced that the 'Mojo/ MDA' advertising agencies had been awarded the contract for the Bicentenary advertising. This decision resulted in positive enthusiasm towards the ABA for the first time in years. These agencies had been successful in creating advertising campaigns which utilised unique Australian imagery to induce a sense of national pride. Alomes, a social historian, referred to this style of advertising as 'popular nationalism' and 'societal marketing' (O'Brien, 1991). The ABA instructed the agencies to produce an advertising campaign which would create excitement and involvement in the Bicentenary. The agencies' response to this demand was to abandon the 'Living Together' theme in favour of 'Celebration of a Nation'. The ABA was quick to adopt this change of direction, despite the many battles it had fought to retain the original 'Living Together' theme.

This media campaign did not embrace any of the visionary ideals with which the ABA had been obsessed. Rather, the 'Celebration of a Nation' advertisement was designed to encourage involvement in and enthusiasim for the Bicentenary. Creating public awareness of the Bicentenary was deemed to be very important, since opinion polling up to and including 1985 indicated that the Australian public had little knowledge of and expressed little enthusiasm about the approaching event. The advertisement was shown repeatedly on all television stations, beginning midway through 1987, in the lead-up to the 26 January, 1988 celebrations.

Aims of the Present Study:

The present study is an attempt to analyse the representations of Australia and Australian life contained in this advertisement. This advertisement presented the opportunity to investigate the images and themes which the makers of a cultural product deemed important when encouraging national sentiment. A distinction can be made between the expression of a cultural product, i.e., the actual characteristics of the advertisement itself, and the subjective

<u>impressions</u> that people had of this product (Ichheiser, 1947). The research in this chapter attempts to look at both the 'public' expression and 'subjective' impressions of this advertisement.

As made clear in the previous introduction, the advertisement was shown amongst a background of continuous public debate and discussion. This had the net effect of producing a considerable public expressions of opinion, both negative and positive, towards the approaching celebrations. Given the ABA's stormy amd controversial 9-year history, the general public was exposed to a barrage of opinions, emotions and attitudes towards the event. The advertisement was therefore but one of the many possible influences on the public's views and thoughts about the Bicentenary. Given this context, it was considered realistic to evaluate respondents' subjective impressions of the advertisement by showing it after respondents were exposed to different evaluative introductions. Subjects were randomly assigned to one of three groups, one receiving a positive intoduction to the Bicentenary, one receiving a negative introduction, and one group which viewed the advertisement without an introduction. This experimental group situation also allowed for the investigation of possible experimental differences in elicited responses due to the different evaluative introductions.

In addition to obtaining data regarding subjects' impressions of the representations contained within the advertisement, general attitudes towards the Bicentenary were also investigated. Finally, in an attempt to determine whether the advertisement influenced representations regarding the nature and structure of Australian society, subjects were also asked to complete an MDS exercise comparing 12 social groups characterising Australian society. This was thought to be particularly important since, as will be demonstrated later, one of the dominant messages of the advertisement was unity between and among different social groups within Australia. Did the advertisement produce a representational structure of Australian society significantly different from those found in previous studies detailed in Chapters 3 and 4? For example, did it lead to a reduction in the perceived social distance between groups? Possible differences in the representational structure were also investigated between the three experimental groups.

Method:

<u>Subjects:</u>

Forty-three psychology I students took part in the study. These included 21 females and 22 males. Mean age was 20.68 years, SD = 5.63 years. Thirty-two of the subjects were born in Australia; 11 were born elsewhere. Fifteen of the subjects had fathers who were born outside Australia, and 14 had mothers born outside Australia. For 12 of these subjects, both parents were born outside Australia. All subjects were recruited by telephone.

<u>Procedure:</u>

Subjects were assigned randomly to one of the three groups. Fourteen subjects received the positive introduction and fourteen received the negative introduction. Fifteen subjects carried out the task with no evaluative introduction. The groups are referred to respectively as the 'positive', 'negative' and 'neutral' groups, or collectively as the three 'experimental' groups. Subjects were seated in cubicles, separated from others. Those assigned to the positive and negative groups were asked to read the introductory passage. All subjects viewed the 'Celebration of a Nation' advertisement, after which they were asked to fill out their questionnaire booklet.

<u>Stimulus material:</u>

Evaluative Introductions:

The evaluative introductions used in the study were passages selected from a large number of articles and editorials which appeared in the local Adelaide newspaper,"The Advertiser", and the national paper "The Australian", during the period 1 January 1988 to 30 January 1988. This period included the three weeks immediately prior to, and one week after, 26 January. During this time, the print medium contained many articles and editorials concerning the Bicentenary. The <u>negative introduction</u> read as follows:

> "The problem today is that lavish spending on the Bicentenary coincides with what is perceived to be the gradual breaking down of essential services such as hospitals, prisons, transport and law and order, etc. The amount of violence caused by disturbed people seems abnormal.
> Also, despite what is generally thought to be an affluent society, poverty seems to be growing. More people are homeless. Evidence is that many of the

homeless are deserving, decent working people . . . What we are seeing is the emergence of more real poverty and less reliable essential services . . ." (Editorial, The Australian, 5 January, 1988)
"In this bicentennial year Australia has unacceptably high levels of poverty and unemployment; low standards of health among some Aboriginal communities; an unacceptably big Government and tensions between some groups in the community". (Mr Olsen, South Australian Leader of the Opposition, The Advertiser, p. 2, 19 January, 1988).

The positive introduction:

"As we celebrate Australia Day, 1988, 200 years after the landing at Sydney Cove of Captain Phillip, there is much to smile about. As the Prime Minister has acknowledged, we have had our faults, our history has its shameful and its tragic dimensions, but overall there is much more to be proud of than to lament.
For in our short history, and with our modest population, Australia has made a distinctive contribution, in science and the arts, in literature and many intellectual fields, in sport, in the history of martial valour, in forms of social organisation and political development, in running a diverse yet unified society, in producing this remarkable nation, this blessed land under the sun called Australia . . .
On this happy day we have a right to be a happy nation and to bask for a moment in contented reflection on 200 years of remarkable achievement", (Editorial, The Australian, 26 January, 1988).

The Advertisement:

The 'Celebration of a Nation' advertisement was shown frequently across all television channels in the lead-up to Australia day, 26 January, 1988. It began with a brief display of the Australian flag which was then followed by a focus on Ayers Rock amidst the outback landscape of central Australia. This formed the background for the coming together of many prominent Australian celebrities and personalities who, in song, were encouraging and inviting the Australian people to 'give us a hand' in celebrating the nation's 200th birthday. The advertisement was made in November 1986, in Uluru (Ayers Rock) National Park. The Bulletin magazine described the group of 60 people who took part in the commercial as a 'most extraordinary gathering of strange bedfellows' (cited in O'Brien, 1991, p. 123). This group included television personalities, sportspersons, popular singers, fashion designers and artists. The Mojo/MDA advertising agencies recommended that no political identities should be included in the advertisement. The ABA and the agencies both made certain that no identity in the advertisement "promotes an issue of political or national sensitivity, thereby endangering the Bicentennial Authority's neutral stance on affairs" (cited in O' Brien, 1991, p. 124). Indeed the popular naturalist and conservation consultant, Harry Butler, who was to

take part in the advertisement, was excluded because several days before it was made he recommended that stage two of Kakuda National Park should not be World Heritage listed. This had received front page press since his recommendation had differed from the Federal government's support of Heritage listing.

The Questionnaire:

Reactions to the Advertisement:

After viewing the advertisement, subjects were asked to complete a questionnaire booklet (see Appendix D1 for questionnaire layout) which contained both open-ended and fixed response questions. The questionnaire began with two open-ended questions: *'What do you think are the dominant images presented in this advert?'*, and *'What message do you think the makers of this advert were trying to put across?'* These two questions were chosen so as to determine what respondents perceived to be the most salient and dominant images in the advertisement, and what they understood by its content. That is, these questions tried to tap both the pictorial imagery and cognitive content of the message.

To obtain measures of subjects' affective and evaluative reactions to the advertisement, the Positive Affect and Negative Affect Scales were used (PANAS Scales: Watson, Clark & Tellegen, 1988). Subjects were asked to read 20 words that describe different feelings and emotions, and to indicate on a five-point scale to what extent the advert made them feel this way. Response categories ranged from 'very slightly or not at all' to 'extremely'.

This was followed by a question asking respondents whether they thought this was a good advert for Australia's Bicentenary (yes/no) and to give reasons for their answers. This completed the questions which were aimed directly at the advertisement itself.

Attitudes Towards the Bicentenary:

In order to gain some insight into what this sample of subjects felt and thought about the Bicentenary, the rest of the questionnaire attempted to tap their general attitudes towards the occassion. Four open-ended questions were asked initially.

1. What do you think, were the main objectives of the Bicentenary celebrations?

2. What did the Bicentenary mean to you?

3. What, in your opinion, were some of the positive features (if any) of celebrating the Bicentenary?

4. What, in your opinion, were some of the negative features (if any) of celebrating the Bicentenary?

The purpose of these questions was to elicit subjects' thoughts and feelings about this event, and to compare the most recurring thematic responses to some of the major goals and objectives of the Bicentenary, as embodied in the rhetoric of the organisers and politicians.

The next section of the questionnaire included a series of six statements which respondents were asked to evaluate on a seven-point scale as to whether these were (a) clear and obvious goals of the Bicentenary celebrations (b) how good or bad these goals were and (c) how successful the celebrations were in achieving these goals. The six statements were:

1. To celebrate 200 years of European settlement.

2. To unite the different groups of people in Australia.

3. To instil national pride and patriotism in Australians.

4. To make Australians aware of their European (white) history.

5. To make Australians aware of their Aboriginal (black) history.

6. To highlight and celebrate the achievements and progress which has made Australia 'the lucky country'.

All of these statements reflect the range of goals and objectives of the Bicentenary which had been expressed publicly by various officials and politicians associated with the event. The fifth statement (awareness of black history) was not as commonly mentioned as the others, but was included given that some sections of the community perceived and contextualised the Bicentenary predominantly within Aboriginal concerns. This part of the questionnaire does not simply assess whether or not these six issues were perceived as objectives of the Bicentenary, but also asks the respondents to evaluate these goals and to judge whether or not these objectives had been met successfully by the Bicentenary. A high score indicates that respondents viewed these statements as clear and obvious goals of the Bicentenary, evaluated

the statements as good goals, and as having been implemented successfully during the Bicentenary.

Finally, respondents were asked whether they were in favour and supportive of Australia's efforts to celebrate 200 years of white settlement. To get a measure of participation in the celebrations, they were also asked to list any Bicentenary functions/celebrations they had attended the previous year. Lastly, they were asked to indicate which political party they would vote for if an election were held the following day.

MDS Exercise:

As with the previous multidimensional scaling exercises performed in Chapters 3 and 4, the respondents in the present sample were asked to judge the (dis)similarity between pairs of social groups along a 9-point scale. The original 12 groups were used in the present study: women, men, politicians, Aborigines, migrants, refugees, unemployed, trade unions, big business, working class, middle class and upper class. Thus, 66 paired judgements were made by each respondent. The order of stimulus pairs was randomised, and a second version of the questionnaire presented the pairs in the reverse order. Approximately half the subjects received the second version of the questionnaire. Data from each subject were combined to form an averaged (dis)similarity matrix for the overall sample of 43 students. Separate averaged matrices for the three experimental groups were also obtained. MINISSA analyses were performed on these data matrices.

Results:

<u>Subjective Impressions of the Advertisement:</u>

The open-ended responses were content analysed. Each unique response was written on an index card. All responses were then sorted into categories or themes. Subjects often gave more than one response. If a subject repeated the same point or idea, it was only coded once in the same category. Coding of responses was carried out by the author. An independent judge repeated the procedure which allowed for a reliability check on the sorting of responses. Kappa was used to measure inter-rater agreement in the sorting of category responses (Cohen, 1968).

Question 1, 'What do you think are the dominant images presented in this advert?'

For this question, 132 different responses were given (mean number of responses =
2.6). Most of the responses fell into seven major categories listed in Table 7.1. Details of
individual responses and their categorisation can be found in Appendix D2. Inter-rater
agreement in the sorting of categories yielded a kappa value of .76.

The first category contained responses which referred to the party and celebratory
atmosphere in the commercial. References to happiness and fun were common.
Approximately 70% of respondents gave responses of this nature. Forty-four percent of the
subjects made reference to the images of unity and togetherness contained in the
advertisement. About 42% mentioned dominant Australian symbols such as Ayers Rock, the
Australian outback and landscape, sunshine, akubra hats and the Australian and Bicentenary
flags. The most frequently mentioned of all these symbols was the prominent Australian
landmark of Ayers Rock, one subject describing it as the 'heart of Australia'. Interestingly,
only three subjects mentioned the Australian flag. Category 4 contained an equal number of
responses as category 3. These contained references to Australian pride, nationalism and the
common identity of 'Australians'. Responses included:
'200 years is something to be proud of' and
'Australians should be proud because it is a marvelous country'.

About 35% of subjects referred to the dominant images of the celebrities and famous
faces in the commercial. Twenty-eight per cent referred to the diversity of people shown in
the advertisement. This included responses such as
'black and white races together',
'diversity of Australian people',
'portrays wide section of community, e.g., handicapped, aged, children'.

In stark comparison to these responses are the responses contained in category 7.
Eighteen per cent of subjects made comments regarding the unrepresentativeness of the
people in the advertisement or people who were not included. For example,
'no black Australians',
'only one aboriginal',

'token aboriginal and disabled person in wheelchair but mostly people were young,

attractive, fit and carefree',

'no signs of multiculturism'. One person asked,

'what happened to the person off the street?'.

Question 2, 'What message do you think the makers of this advert were trying to put across?'

Ninety responses were given (mean number of responses = 2.02), most of which could be categorised into three major themes. These are also listed in Table 7.1. The detailed responses to this question and their category sorts are presented in Appendix D2 (kappa = .77). The most frequently cited responses were those containing references to the legitimacy of celebrating 200 years of progress and achievement, pride in Australia and in being Australian, and Australia being a great nation. The second category contained references to the unification theme, such as

'everyone should celebrate Bicentenary-aborigines, disabled, young, old, immigrants', and,

'they want everyone to participate'

were common. The last major category of responses mentioned the advertisement's attempt to promote support and encouragement for the Bicentenary celebrations, with its emphasis on fun and enjoyment. About 46% of subjects made references of this kind.

No significant relationships emerged between demographic characteristics (sex, country of birth, parents' country of birth and socio-economic status), experimental group membership and themes mentioned in the open-ended responses to these questions.

Table 7.1: Categories of open-ended responses to advertisement.

What do you think are the dominant images presented in this advertisement? N = 132

Main Categories	% Ss giving this response
1. Party atmosphere, celebrations, happiness, fun. N = 30	69.76%
2. Unity, togetherness, people coming together, friendship, mateship. N = 19	44.18%
3. Symbols representing Australia - Ayers Rock, Australian outback /landscape, sunshine akubra hats. N = 18	41.86%
4. Australians should be proud, nationalism, common identity, patriotism, the country 'Australia'. N = 18	41.86%
5. Famous Australians, personalities, celebrities. N = 15	34.83%
6. Diversity of society, people from various backgrounds. N = 12	27.89%
7. Omissions, unrepresentativeness of people in advertisement of Australian society. N = 8	18.60%
8. Miscellaneous. N = 12	27.91%

What message do you think the makers of this advertisement were trying to put across? N = 90

1. To celebrate 200 years of achievement, progress / Great Nation / Pride in Nation. N = 25	58.13%
2. All types of people to join in / people from all backgrounds / Unification Theme. N = 24	55.81%
3. Support for Bicentenary Celebrations / Participation in Bicentenary. N = 20	46.50%

<u>Affective and Evaluative Reactions to the Advertisement:</u>

Highest means on the PANAS scales (see Table 7.2) suggested that the advertisement made the respondents feel interested (M = 2.98), proud (M = 2.91), attentive (M = 2.81), enthusiastic (M = 2.81), excited (M = 2.52) and inspired (M = 2.52). All these adjectives are positive. Lowest means on the scales indicated that the advertisement was least likely to make the respondents feel nervous (M = 1.02), scared (M = 1.12), jittery (M = 1.22) and upset (M = 1.31). Thus, the advertisement did not evoke negative emotions to any great extent. There was a highly significant difference between total scores on the positive (M = 24.75) and negative scales (M = 13.93), indicating that the advertisement evoked positive emotions to a significantly greater extent than it evoked negative emotions (t = 5.19, df = 39, p < .0001).

<u>Table 7.2: Means and Standard Deviations on PANAS Scales.</u>

Emotion	M	SD
Interested	2.98	1.24
Distressed	1.54	1.01
Excited	2.52	1.22
Upset	1.31	0.78
Strong	2.05	1.18
Guilty	1.57	0.91
Scared	1.12	0.40
Hostile	1.62	1.17
Enthusiastic	2.81	1.40
Proud	2.91	1.43
Irritable	1.81	1.17
Alert	2.41	1.04
Ashamed	1.57	1.09
Inspired	2.52	1.23
Nervous	1.02	0.15
Determined	1.98	1.04
Attentive	2.81	1.29
Jittery	1.22	0.57
Active	2.24	1.34
Afraid	1.02	0.16

One-way analyses of variance revealed no significant differences between the three experimental groups on the PANAS scales. Tests for sex differences indicated that females felt more enthusiastic (male M = 2.38, female M = 3.24, t = 2.06, df = 40, p < .05) and determined (male M = 1.67, female M = 2.30, t = 2.03, df = 39, p = .05) than males. Point biserial correlations between sex and PANAS scores indicated that being female [coded as 2] was associated with feeling enthusiastic (r_{pb} = .31, p < .05), proud (r_{pb} = .27, p < .05), and determined (r_{pb} = .31, p < .05). Being male [coded as 1] was associated with feeling more ashamed (r_{pb} = -.27, p < .05).

Australian-born respondents [coded as 1] indicated more interest (Aust M = 3.22, non-Aust. M = 2.2, t = 2.40, df = 40, p < .05) and enthusiasm (Aust. M = 3.06, non-Aust. M = 2.00, t = 2.19, df = 40, p < .05) in the advertisement than non-Australian-born respondents [coded as 2]. Point biserial correlations validated the above findings (interest: r_{pb} = -.35, p < .05; enthusiasm: r_{pb} = -.33, p < .05) but also indicated that being Australian-born was associated with feeling strong (r_{pb} = -.27, p <.05), and being born outside Australia was associated with feeling nervous (r_{pb} = .28, p < .05).

Having an Australian-born father was associated with interest (r_{pb} = -.28, p< .05), enthusiasm (r_{pb} = -.27, p < .05), but also with guilt (r_{pb} = -.28, p < .05; t = 2.36, df = 39.02, p < .05). Having a father born outside Australia was associated with irritability towards the advertisement (r_{pb} = .33, p < .05; t = -2.24, df = 40, p < .05). Having an Australian-born mother was also associated with enthusiasm (r_{pb} = -.28, p < .05).

Evaluation of Advertisement:

In response to the question, _Do you think this was a good advert for Australia's Bicentenary?_ 53.5% (N = 23) of the sample answered yes, 41.9% (N = 18) answered no and 4.7% (N = 2) answered both yes and no. No relationships were found between demographic variables, experimental group membership and responses to this question.

Respondents who thought it was a good advertisement obtained significantly higher scores on 9 of the 10 positive emotions. A highly significant association was found between liking/disliking the advert and overall positive affect scores (r_{pb} = .72, p < .001) as well as

overall negative affect scores (r_{pb} = -.66 p < .001)[1]. Respondents who did not like the advertisement were more likely to feel distressed (M = 2.11 vs M = 1.09, t = -3.22, df = 18.26, p <.01), upset (M = 1.71 vs 1.00, t = -3.08, df = 38, p <.01), hostile (M =2.47 vs M = 1.04, t = -3.99, df = 16.48, p <.001), irritable (M = 2.76 vs M = 1.13, t = -5.05, df = 17.67, p < .0001) and ashamed (M = 2.12 vs M = 1.17, t = -2.61, df = 19.98, p <.05).

Table 7.3: Do you think this was a good advertisement for Australia's Bicentenary?	% Ss giving this response,
YES Responses: N = 57	N = 25
1. Party atmosphere, fun, good time, everyone to join in celebrations. N = 12	48%
2. Good song, catchy tune. N = 11	44%
3. Promoted pride, nationalism. N = 8	32%
4.The use of famous people/celebrities. N = 7	28%
5. The inclusion of a variety of people. N = 6	24%
NO Responses: N = 32	N = 20
1. The use of a limited range of people in advertisement. N = 11	55%
2. The deceptiveness of the advertisement, avoids problems in Australia. N = 9	45%
3. Aboriginal issues. N = 5	25%

NB: The 2 subjects who gave both yes and no responses are added to the yes and no total Ns respectively.

Reasons given for these responses were categorised as in the previous open-ended questions. Fifty-seven unique responses were given among the 'yes' responses, most of which fell into five major categories. These are outlined in Table 7.3. The detailed responses and their category sorts can be found in Appendix D3 (kappa = .89). The most common reason cited for approval of the advertisement was the party atmosphere, fun and good time theme of the advertisement. Examples of these responses include:

'makes you want to sing along and join in all the fun' and

'everyone in it was happy and appeared to enjoy being part of it'.

Eleven respondents thought the advertisement was good because they liked the song and the catchy tune. The third category contained reasons referring to the promotion of pride and nationalism in the advertisement, and the fourth category of reasons referred to the use of

famous faces and celebrities in the advertisement. The last major category contained reasons which referred to the inclusion of a variety and diversity of people in the advertisement: reasons like,

> 'it included people from varied ethnic and social backgrounds', and

> 'we were shown people of totally different backgrounds, occupations, ages celebrating'.

The 'no' responses yielded three major categories shown in Table 7.3. Detailed responses and category sorts can be found in Appendix D3 (kappa = .92). The most common reason for disapproval of the advertisement referred to the limited range of people in the advertisement. This is in complete contradiction to the last category of reasons for approval of the advertisement - that is, the diversity of people contained within the advertisement. Responses included:

> 'there was little race or ethnic representation and these groups make up a majority of our population',

> 'it failed to reach a wide cross-section of Australian society. I felt that it was aimed at the Anglo-Saxon 'ocker'', and

> 'this commercial only shows discrimination towards aboriginals. Throughout the advertisement there was only 1 aboriginal. There were also no ethnics in the advertisement or Asians etc. They are also Australian if they live here and if they also worked hard for this nation'.

The second category contained reasons referring to the deceptiveness of the advertisement, of its aim to portray a rosy picture of Australian life by avoiding problems. For example:

> 'it was too light hearted, unreal, life is not one big party. Australia has some real issues to face; racism, poverty, drugs and homelessness, and should not pretend everything is going well', and

> 'in some ways it was particularly un-Australian as it showed a strong sense of community which the majority of Anglo-Saxon Australians do not experience'.

The last category contained reasons which characterised Aboriginal objections to the Bicentenary, such as,

'this commercial only shows discrimination towards aboriginals. The white Australians show no respect towards the first inhabitants of this nation' and *'it failed to mention the 200 years of 'white' supremacy'.*

Attitudes Towards the Bicentenary:

Open-ended Responses:

1. What do you think were the main objectives of the Bicentenary celebrations?

Seventy-eight different responses were obtained to this question. Appendix D4 details these responses and their category sorts (kappa = .92). Table 7.4 indicates that 44 % of the sample felt that the main objective of the Bicentenary celebrations was to make Australians aware of the 200 years of white history. Close to 42% said that the main objective was to elicit feelings of patriotism and pride. Over 30% of respondents felt that the main aim was to unite, or at least to create a feeling of unity amongst, all Australians. Eight respondents felt that the celebrations were an important means by which to focus international attention upon Australia.

Table 7.4: What, do you think, were the main objectives of the Bicentenary celebrations?
N = 78

Main Categories	% Ss giving this Response
1. Awareness and celebration of 200 years of white history. N = 19	44.19%
2. Patriotism, pride, nationalism. N = 18	41.86%
3. To unite Australians. N = 13	30.23%
4. Australia's image vis-a-vis the rest of the world. N = 8	18.60%
5. Aboriginal objections to the celebrations. N = 4	9.30%
6. To forget problems. N = 3	6.98%
7. Miscellaneous. N = 13 [3 Ss gave more than 1 miscellaneous response]	23.26%

2. What did the Bicentenary mean to you?

This question yielded 43 different responses. These responses and their category sorts can be found in Appendix D5 (kappa = .79). Table 7.5 details overall category responses to this question. Eleven subjects responded with either positive or neutral statements (category 2), whereas close to half the sample indicated that the event meant very little to them (category 1), or else made negative or cynical references to the occassion (category 4). Approximately 14% of the sample indicated their ambivalence towards the event by responding with mixed emotions.

Table 7.5: What did the Bicentenary mean to you? N = 43

Main Categories	% Ss giving this Response
1. Nothing / very little. N = 16	37.21%
2. Neutral and positive statements. N = 11	25.58%
3. Mixed emotions. N = 6	13.95%
4. Not a lot, coupled with negative and cynical statements. N = 5	11.63%
5. Increased awareness of Aboriginal issues. N=5	11.63%

3. What, in your opinion, were some of the positive features (if any) of celebrating the Bicentenary?

The 60 responses to this question and category sorts are detailed in Appendix D6 (kappa = .72). Table 7.6 indicates that, consistent with previous responses, approximately 42% of the sample felt that the increased awareness of Australia's 200-year white history and heritage was a positive feature of the Bicentenary. Twenty one per cent indicated that the surge in nationalist sentiment brought about by the event was a positive feature, as was the attempt to unite all Australians in the celebrations. Eight respondents referred to the Bicentenary events and activities as positive features. Six respondents felt that the Bicentenary, paradoxically,

increased people's awareness of the plight of the Aboriginal people, and that this was a positive consequence.

Table 7.6: What, in your opinion, were some of the positive features (if any) of celebrating the Bicentenary? N = 60.

Main Categories	% Ss giving this Response
1. Increased awareness of Australia's history and heritage. N = 18	41.86%
2. Increased pride and patriotism. N = 9	20.93%
3. Unified people. N = 9	20.93%
4. The Bicentenary events and activities. N = 8	18.60%
5. Increased awareness of Aboriginal issues. N = 6	13.95%
6. International awareness of Australia. N = 4	9.30%
7. Miscellaneous. N = 6	13.95%

4. What, in your opinion, were some of the negative features (if any) of celebrating the Bicentenary?

As illustrated in Table 7.7, responses to this question fell into two major categories. The 54 individual responses to this question and category sorts are presented in Appendix D6 (kappa = .94). Over 50% of the sample indicated that the Bicentenary celebrations ignored, or failed to acknowledge, Australia's Aboriginal or black history and culture. Many of these respondents referred to the exclusion of Aborigines in the celebrations and made references to their historical maltreatment. Forty-two per cent of the sample referred to the financial cost of staging the celebrations, most people arguing that the money could have been put to better use.

Table 7.7: What, in your opinion, were some of the negative features (if any) of celebrating the Bicentenary? N = 54

Main Categories	% Ss giving this Response
1. Aboriginal issues. N = 24	55.81%
2. Wasted money, financial cost. N = 18	41.86%
3. Miscellaneous. N = 12	27.91%

Questionnaire Scale:

Table 7.8 presents the means and standard deviations for responses in the questionnaire scale. Consistent with the open-ended responses, the sample viewed national pride and the celebration of 'the lucky country' as the most obvious and clear goals of the Bicentenary. Not surprisingly, the least obvious goal was awareness of Australia's black history. Unification of different groups in society and pride and patriosm were evaluated highly as goals, compared to awareness of white history and the celebration of 200 years of European settlement which were evaluated less highly as goals. Celebrating 200 years of European settlement was seen as the most successful of all the goals, the least successful being Australian awareness of Aboriginal history and the unification of different groups in society.

Table 7.8: Means, SDs on Questionnaire Items- t test Values between Evaluation & Success of Goals.
[smaller values indicate greater perception of goal, more positive evaluation, and greater success]

	Goal	Evaluation	Success	t value
1. To celebrate 200 years of European settlement.	2.47 1.83	3.88 1.71	2.49 1.37	5.04*
2. To unite the different groups of people.	3.09 1.93	1.65 1.34	4.35 1.57	-9.15*
3. To instil national pride and patriotism.	1.56 0.80	2.05 1.21	3.09 1.29	-4.59*
4. To make Australians aware of their European (white) history	3.14 1.97	3.12 1.64	3.05 1.51	0.20
5. To make Australians aware of their Aboriginal (black) history.	5.37 1.76	2.43 1.70	4.91 1.70	-7.05*
6. To highlight and celebrate the achievements and progress which has made Australia 'the lucky country'.	2.21 1.34	2.65 1.62	3.05 1.33	-1.51

* p <.0001

Correlations were obtained to determine the degree of consistency between subjects' identification of each questionnaire statement as, (a) a clear goal of the Bicentenary, (b) the evaluation of each statement as a goal, and (c) subjects' perceptions of whether the Bicentenary was successful in achieving each goal.

1. To celebrate 200 years of European settlement:

The identification of celebrating 200 years of European settlement as a goal of the Bicentenary was only marginally correlated with its evaluation as a good goal ($r = .25$, $p = .05$), and correlated significantly with its perceived success as a goal ($r = .56$, $p < .001$). The statement's evaluation as a goal was correlated significantly with its perceived success ($r = .32$, $p < .05$).

2. To unite the different groups of people in Australia.

The above statement's identification as a goal correlated significantly with its evaluation as a goal ($r = .37$, $p < .01$), and with its perceived success ($r = .52$, $p < .001$). The evaluation of this goal was not associated significantly with its perceived success as a goal of the Bicentenary ($r = .13$, $p = .21$).

3. To instil national pride and patriotism in Australians.

The identification of the above statement as a goal was not correlated with its evaluation as a goal ($r = .22$, $p = .08$), and correlated only marginally with its perceived success ($r = .25$, $p = .05$). However, its evaluation as a good goal was related significantly to its perceived success ($r = .29$, $p < .05$).

4. To make Australians aware of their European (white) history.

The identification of the above statement as a clear goal of the Bicentenary did not correlate with its evaluation as a goal ($r = .08$, $p = .31$). The statement's evaluation as a goal was not associated with its perceived success ($r = -.17$, $p = .13$).

5. To make Australians aware of their Aboriginal (black) history.

The identification of this statement as a goal of the Bicentenary was related significantly to its evaluation as a goal ($r = .30$, $p < .05$). Its evaluation as a goal was not related to its perceived success ($r = .13$, $p = .20$).

6. To highlight and celebrate the achievements and progress which has made Australia the 'lucky country'.

Respondents' identification of the above statement as a clear goal of the Bicentenary was not related to its evaluation as a goal ($r = .23$, $p = .07$) but was related significantly to its

perceived success (r = .65, p < .001). Its evaluation as a goal was related significantly to its perceived success (r = .33, p < .05).

T-test analyses shown in Table 7.8 also indicate perceived discrepancies between the evaluation of some of the goals and their successful implementation. The 'celebration of 200 years of European settlement' was rated as significantly more successful in its implementation compared to its evaluation as a positive goal. Alternatively, the unification of different groups in Australia was rated much more highly as a positive goal than was its perceived success during the Bicentenary celebrations. Similarly, 'instilling national pride and patriotism' was rated significantly more highly as a goal than a reality. Finally, and not surprisingly, 'awareness of Aboriginal history' was rated more highly as a goal compared to its perceived success.

The internal reliability for each of the three sections in this questionnaire scale was only moderate. The first section identifying goals of the Bicentenary yielded a Cronbach's alpha of .56. The second section, which required subjects to evaluate each goal, yielded an alpha of .65. These alpha values were obtained after statement 4 was omitted from each of these sections [To make Australians aware of their European (white) history]. Section three, which asked subjects to assess the success of each of the stated goals, yielded a Cronbach's alpha of .59 (no statements were omitted from this scale). Composite scores were calculated for each of these three sections and analyses were performed between these scores and other variables.

There were no experimental group differences (based upon positive, negative and no evaluative introductions before questionnaire administration) nor socioeconomic differences in composite scores on these scales. Sex differences indicated that males were more likely to judge the goals as having been unsuccessful than were females (F = 8.50, df = 1, 42, p < .01). A significant point biserial correlation also indicated that males (coded as 1, females as 2) were more likely to judge the goals as having been less successful (r_{pb} = -.41, p < .01). Australian-born respondents (F = 3.43, df = 1, 39, p = .07) and respondents with Australian-born fathers (F = 4.21, df = 1, 39, p = .05) were marginally more likely to identify the statements as clear goals of the Bicentenary, compared to non-Australian-born

respondents and those whose fathers were born outside Australia. Point biserial correlations also yielded results in this direction (r_{pb} = .29, p < .05, and r_{pb} = .32, p < .05 respectively). Australian-born respondents were also more likely to evaluate the goals positively (F = 3.38, df = 1, 36, p = .07; r_{pb} = .27, p < .05).

Significant correlations were also found between composite scores on these scales and subjects' PANAS scores. Of the 20 emotions included in the PANAS scales, 13 were correlated significantly with subjects' assessments of Bicentenary goals, 11 with the evaluation of the goals and 13 with goal success ratings. To simplify data presentation, the goal assessment, evaluation and success ratings were correlated with each subject's combined positive (PA) and combined negative (NA) affect scores. To facilitate interpretation of correlations, scoring on the identification, evaluation and success of goals was reversed for these analyses.

The identification of the questionnaire statements as clear goals of the Bicentenary was associated significantly with positive emotional reactions towards the Bicentenary advertisement (r = .47, p < .01). An overall negative affect towards the advertisement was associated significantly with not identifying the statements as obvious goals (r = -.28, p < .05). Positive goal evaluation was related to overall positive emotions towards the advertisement (r = .43, p < .01). Higher success ratings of the Bicentenary goals were also correlated significantly with positive emotional reactions (r = .54, p < .001) towards the advertisement.

There were several differences between subjects who previously in the questionnaire had indicated liking the Bicentenary advertisement, and those indicating dislike for the advertisement. Subjects who liked the advertisement were more likely to judge the statements as clear and obvious goals of the Bicentenary, compared to subjects who disliked the advertisement (F = 10.20, df = 1, 37, p < .01). A point biserial correlation between these two variables yielded a significant association in the above direction (r_{pb} = .47, p < .01). More specifically, subjects liking the advertisement rated the unification of different people (t = 3.90, df = 39, p < .0001), the instilling of national pride (t = 2.29, df = 22.52, p < .05), and awareness of Aboriginal history (t = 2.17, df = 39, p < .05) more highly as obvious and

clear goals of the Bicentenary. Overall, this group was also more likely to evaluate the goals positively (F = 8.97, df = 1, 34, p < .01; r_{pb} = .46, p < .01). Statements such as, celebrating 200 years of European history (t = 2.14 df = 39, p < .05), instilling national pride (t = 4.75, df = 24.16, p < .0001), and celebrating the achievements of the 'lucky country' (t = 2.58, df = 39, p = .05) were judged more positively. Lastly, those who liked the advertisement rated the success of the following goals more highly than those disliking the advertisement: unification of different people (t = 3.97, df = 39, p < .0001), instilling national pride (t = 2.16, df = 39, p < .05), and awareness of Aboriginal history (t = 4.36, df = 37.29, p <.0001). This led to an overall difference in composite scores between the two groups (F = 12.6, df = 1, 40, p < .01) and a point biserial correlation between these two variables of .49 (p < .01).

Support for the Bicentenary Celebrations.

In response to the question of whether subjects were supportive of Australia's efforts to celebrate 200 years of white settlement, 25.6% of the sample answered yes, 25.6% answered no, and 48.8% were uncertain. There was a marginally significant relationship between sex and answers to this question (X^2 = 5.72, df = 2, p =.057). A greater percentage of males were opposed to the celebrations (40.9%) compared to females (9.5%). Females were more likely to be uncertain of support for the celebrations (61.9%) compared to males (36.4%). There was also a significant relationship between evaluation of the Bicentenary advertisement and support for the celebrations (X^2 = 11.86, df = 2, p < .01). A greater percentage of people who liked the advertisement were supportive of the celebrations (43.5%) than were non-supportive (5.6%). Alternatively, those who did not like the advertisement were more likely to be non-supportive of the celebrations (50%) than to be supportive (8.7%). Those who were uncertain about support for the Bicentenary were evenly divided between liking and disliking the advertisement. No other significant chi-square relationships were found.

PANAS scale differences between people who were supportive, unsupportive and uncertain about their support for the celebrations produced the following results, using one-

way analysis of variance and applying the Student-Newman-Keuls post hoc test of comparisons at the .05 level of significance.

Interest. The uncertain group expressed significantly more interest than did the group opposed to the celebrations (F = 3.42, df = 2, 39, p <.05).

Hostile. The opposed group expressed more hostility than did both the supportive group and the uncertain group (F = 5.43, df = 2, 39, p <.01).

Enthusiastic. The supportive and uncertain groups expressed more enthusiasm than did the opposed group (F = 4.59, df = 2, 39, p <.05).

Proud. The supportive group expressed more pride than did the opposed group (F = 3.26, df = 2, 39, p < .05).

Irritable. The opposed group expressed more irritability than did both the other two groups (F = 3.88, df = 2, 39, p <.05).

Ashamed. The opposed group expressed more shame than did both the other two groups (F = 10.50, df = 2, 39, p <.001).

Inspired. The supportive group expressed significantly more of this emotion than did the opposed group (F =3.83, df = 2, 39, p <.05).

Attentive. The uncertain group was more attentive than was the opposed group (F = 3.31, df = 2, 39, p <.05).

The group opposed to the celebrations evaluated the celebration of 200 years of European settlement more negatively as a goal than did the other two groups (F = 5.96, df = 2, 40, p <.01). The opposed group also differed significantly from the supportive group in respect to the evaluation of pride and patriotism as a goal, the former evaluating it more negatively (F = 4.67, df = 2, 40, p <.05). Finally, the opposed group rated awareness of Aboriginal history as being less successful in its implementation than did the supportive group (F = 3.97, df = 2, 40, p <.05).

Attendance at Bicentenary Functions.

As a behavioural measure of support, a slight majority indicated having attended a Bicentenary function during 1988 (53.5%). The only relationship found between this question and other responses was with experimental group membership (X^2 = 5.94, df = 2,

p = 0.05). However, this relationship was only marginally significant. A greater percentage of people assigned to the neutral group (73.3%) had attended a Bicentenary function, compared to people in the negative group (57.1%) and positive group (28.6%). Though not significant (X^2 = 2.75, df = 1, p = .097), there was a tendency for people from higher socioeconomic backgrounds to have attended a Bicentenary function (63%) than those from middle and lower socioeconomic backgrounds (35.7%). On the PANAS scales, those who had attended a Bicentenary function reported feeling less upset (t = 3.11, df = 40, p <.01), guilty (t = 2.43, df = 24.74, p <.05), and ashamed (t = 3.31, df = 19.29, p <.01) compared to subjects who had not attended a Bicentenary function. Point biserial correlations between attendance/non-attendance and PANAS scores indicated the following relationships (scoring for attendance was reversed from that which appears in the questionnaire to facilitate interpretation of correlations). Attending a Bicentenary function was related to feeling excited (r_{pb} = .28, p < .05) about the advertisement, and non-attendance was associated with feeling distress (r_{pb} = -.29, p < .05), upset (r_{pb} = -.44, p < .01), guilt (r_{pb} = -.38, p < .01), hostile (r_{pb} = -.30, p < .05) and ashamed (r_{pb} = -.49, p < .001). Furthermore, those attending a Bicentenary function evaluated the goal of celebrating 200 years of European history more positively (t = 2.32, df = 41, p <.05) than did non-participants.

Voting Preferences.

Finally, in response to voting preferences, if an election had been held tomorrow 25.6% indicated they would vote for the Labor Party, 20.9% for the Liberal Party, 16.3% for the Democrats, 9.3% for other peripheral parties, and 27.9% said they were uncertain. No significant relationships were found between this question and other categorical responses. On the PANAS scale, the following group differences were found.

Hostile. Subjects indicating voting preferences for the Australian Democrats and other 'minor parties' (these two voting preferences were combined) expressed more hostility to the advertisement compared to subjects with Labor, Liberal and 'uncertain' voting preferences (F = 3.77, df = 3, 38, p <.05).

Enthusiastic. Subjects with Liberal voting preferences expressed more enthusiasm than subjects with 'Democrat plus other'voting preferences (F = 3.49, df = 3, 38, p <.05).

Proud. Subjects with 'Democrat plus other' voting prefences expreseed less pride compared to all other groups. (F = 3.55, df = 3, 38, p <.05).

Irritable. The 'Democrat plus other' group expressed more irritability towards the advertisement than the subjects who were uncertain about their voting preference (F = 3.06, df = 3, 38, p <.05).

Alert. The Democrat group rated as being less alert to the advertisement than were Labor voters and those uncertain about political preference. Furthermore, the Liberal group were less alert than the uncertain group (F = 7.04, df = 3, 38, p <.001).

Inspired. The Democrat group rated as being significantly less inspired than was the uncertain voting group (F = 3.13, df = 3, 38, p <.05).

The group which was uncertain about voting preference evaluated the celebration of 200 years of European history more highly as a goal than did the Liberal and Democrat voters (F = 5.20, df = 3, 39, p <.01). The Democrat voters evaluated pride and patriotism less highly as a goal compared to the Liberal and uncertain groups (F = 3.51, df = 3, 39, p <.05).

MDS Analysis.

Using the 2-dimensional MINISSA configuration, produced by the psychology students in Chapter 4 as a standard of comparison (Figure 7.1), the present student sample's 2-dimensional MINISSA solution, with an associated stress value of 0.14 (Figure 7.2), is similar in overall structure. This is particularly so for the first dimension which, again, reflects a socioeconomic scaling of the groups. There are, however, some qualitative differences between the two representations. The working class category is placed further down the socioeconomic dimension in Figure 7.1 than in Figure 7.2. Furthermore, while a male-female distinction along dimension 2 is evident in Figure 7.2, it differs considerably from the male/female separation of groups in Figure 7.1. There is, however, a similar placement of some groups, such as men with trade unions and working class, and women with middle class.

MINISSA analyses were also performed separately on the three experimental groups, all of which produced very similar representations to Figure 7.2 and 7.1. An INDSCAL analysis using the co-ordinates of Figure 7.1 as a fixed configuration, and inputting the averaged dissimilarity matrices for the entire sample in the present study, as well as the negative, positive and neutral subgroups, indicated that all groups obtained similarly high subject weights on dimension 1 compared to dimension 2. These weights are presented in Table 7.9. Correlations between the computed scores and the original data matrices were high, ranging from 0.78 to 0.83 (average correlation = 0.81). This indicates a good level of fit between the standard configuration and the four averaged data matrices produced in the present study.

Table 7.9. INDSCAL Subject Weights on Dimensions 1 & 2.

	Dimension 1	Dimension 2
Overall Sample.	0.79	0.26
Positive Gp.	0.74	0.24
Neutral Gp.	0.79	0.27
Negative Gp.	0.78	0.26

While the overall structure of the representations were similar for all groups, this does not tell us enough about the perceived relative distances between the social groups. In order to investigate the hypothesis set out previously, that perceived distances between the social groups may be reduced after exposure to the dominant message of the Bicentenary advertisement, the means of the 66 comparisons for each group were rank-ordered for size using Friedman's two-way analysis of variance by ranks. To test for differences between the three experimental groups, Friedman's analysis by ranks by the method of multiple comparisons was used (Siegal & Castellan, 1988). This yielded the following result: $Xr^2 =$ 15.56, df = 2, p < .001. At the .05 level of significance, the difference between the sum of ranks between each of the groups needed to be 27.5. As can be deduced from Table 7.10, the difference between the positive and negative groups exceeds this limit (40.9), as does the difference between the positive and neutral groups (38.5). The difference between the neutral
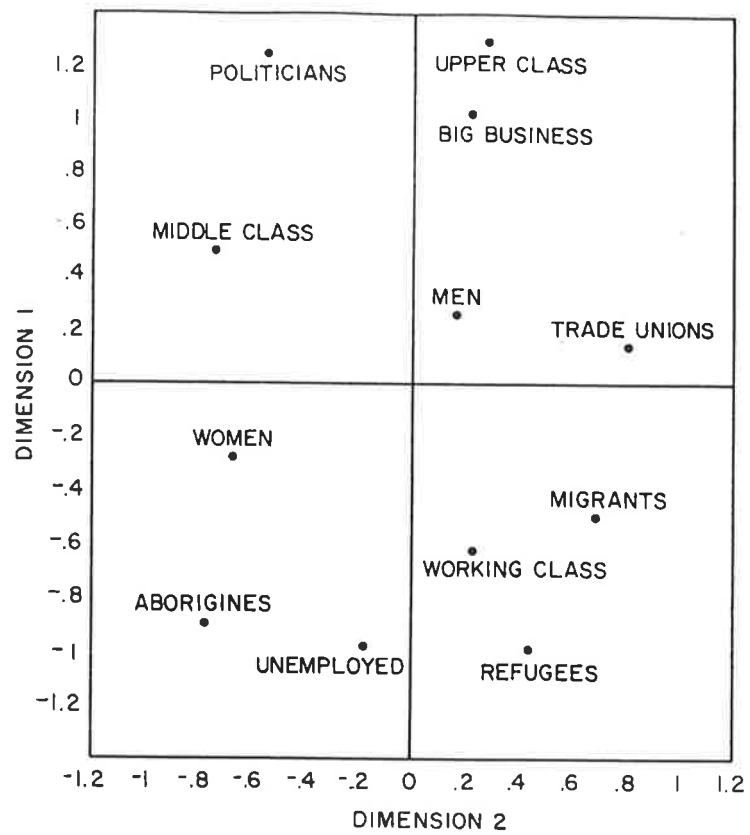
FIGURE 7.1 : Previous Adult Minissa Solution, Dimensions 1&2
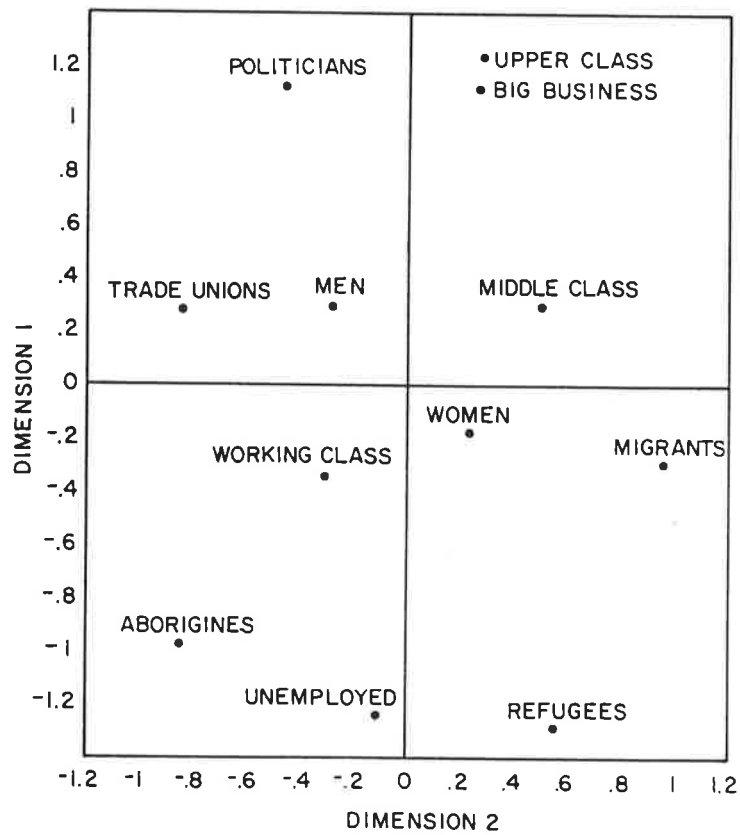
FIGURE 7.2 : Two Dimensional Minissa Solution for Bicentenary Sample

and negative groups is only small (2.4). Thus the means of the positive group were significantly smaller than the means of both the negative and neutral groups. This suggests that the group exposed to the positive evaluative introduction may have been more responsive to the advert's imagery and message content of reduced social distance between the social groups.

Table 7.10 . Sum of Ranks for the Three Experimental Groups.

Sum of Ranks

	Sum of Ranks
Positive group	105.5
Negative group	146.4
Neutral group	144

The means of the experimental subgroups were also rank-ordered against the means obtained by the sample of psychology students who were not exposed to the advertisement before completing the MDS exercise (chapter 4). This yielded the following result, $X_r^2 = 19.96$, df = 3, p < .001, indicating a significant difference between the groups. Using the means obtained by the student sample from Chapter 4 as the control or baseline comparison, the following formula was used to determine which of the groups differed from the control condition: $|R_1 - R_2| \geqslant q(a, \#c) \sqrt{\dfrac{Nk(k+1)}{6}}$ (Siegal & Castellan, 1988).

The difference between the sum of the ranks of the control condition and each of the groups $[R_1 - R_2]$ needed to be greater than the value of 30.55 at the .05 level of significance. As indicated by Table 7.11 only the neutral group difference exceeds this limit and is therefore significantly different from the standard group of comparison.

The neutral group's means were significantly larger, indicating a greater amount of perceived social distance between the groups compared to the standard group. This finding is inconsistent with initial expectations and suggests that, for this subgroup of subjects, viewing the bicentennial advertisement enhanced the perception of difference between social groups in Australian society.

Table 7.11 . Difference between control comparison and experimental subgroups.

	Sum of Ranks.	R_1-R_2
Control (R_1)	155.5	
Positive group	134.5	21
Negative group	184	28.5
Neutral group	187	31.5 > 30.55

Further comparisons of dissimilarity means indicated a significant difference between subjects who had attended a Bicentenary function and those who had not attended (Xr^2 = 23.94, df = 1, p < .001). The former (Sum of Ranks = 114) perceived the social distance between the 12 groups as significantly greater than the latter (Sum of Ranks = 86). A significant difference in ranking of means was also found between those who liked the 'Celebration of a Nation' advertisement and those who did not like the advertisement (Xr^2 = 6.76, df = 1, p < .01). Those who liked the advertisement perceived the social distance between the groups as greater (Sum of Ranks = 113) compared to those who did not like the advertisement (Sum of Ranks = 84). No significant difference was found in the ranking of means between subjects who were supportive (Sum of Ranks = 123.5), unsupportive (Sum of Ranks = 125.5) and uncertain (Sum of Ranks = 147) of support towards the Bicentenary celebrations (Xr^2 = 5.14, df = 2, p = 5.99).

Discussion:

The Advertisement.

Overall, the majority of the respondents evaluated the 'Celebration of a Nation' advertisement positively. They liked its fun, good time atmosphere and its catchy tune. Furthermore, PANAS scale results indicate that the advertisement evoked predominantly positive emotional reactions.

If we look at the advertisement itself and subjects' impressions of it for clues about what it says about Australian society, one recurring theme predominates: the unity and togetherness of the Australian people. Forty-four per cent of the sample saw this as one of the most dominant images in the advertisement and 55.8% felt that this was certainly the

message behind the advertisement: for people from various backgrounds to join in, come together and celebrate. Coupled with this was the image of the diversity of the Australian people, the multicultural and multiracial character of Australian society. Close to 30% of the sample mentioned this as a dominant image. Certainly, the advertisement attempts to give such an impression by portraying a large number of people coming together in a remote location (the centre of Australia) in unity and good spirit to express nationalist sentiment and pride in their country.

But does the advertisement really portray the diversity of the Australian people, i.e., multicultural and multiracial Australia? While 44% of the sample said it did, 18% complained of its general unrepresentativeness of the Australian people and its failure to incorporate some sections of Australian society. A closer and critical look at the advertisement would certainly support the latter analysis, made only by a relatively small percentage of respondents. The overwhelming number of people represented in the advertisement were white, well-known personalities and celebrities. There is one Aboriginal (identity unknown) upon whom the camera focuses a number of times. There are no obvious representatives of multi-ethnic Australia, except for knitwear designer Jenny Kee, who is not only of Asian origin but also a well-known Australian. Interestingly, she is placed in the front row of the mass of people, along with the two major singers and another celebrity who also happens to be handicapped and is in a wheelchair. The Aboriginal participant is standing in the second row. A close scrutiny of the advertisement does not reveal any significant variations from the white well-known person of anglo-saxon origin. There are a small number of unrecognisable faces which supposedly represent the 'average Australian'.

It is remarkable how this 'unrepresentative' representation of the Australian people is able to create a dominant image of the 'diversity of people' to which many of the respondents refer. This advertisement, perhaps like all forms of propaganda and ideology, demonstrates the schism between what has been referred to by Ichheiser (1949) as objective impressions and subjective impressions. Not only does the advertisement create an image of diversity but also an image of unity. The two images are related integrally.

The notion of unity in nationalist sentiment is not uncommon and, in many respects, always forms the underlying intent of any nationalist ideology. As mentioned in the Introduction, the moral and social unity of a society is also at the core of liberalism as an ideology. Certainly, the main thrust of the Bicentenary commercial is that group loyalties are to be subverted for the common good of a united Australia. This was particularly relevant for Aboriginal Australians, the majority of whom opposed vehemently both the celebrations and the whole concept of the Bicentenary.

Social representations theory, perhaps more so than mainstream social cognitive approaches, may inform us where these representations of Australian society come from and how they proliferate in everyday life: how people seize upon such representations in the media and use them to make sense of their everyday social existence in a complex society. It may also inform us how the affective core of a representation contributes to its maintenance and stability. For example, despite the cynicism and critical evaluations some subjects made about the Bicentenary, the images contained in the Bicentenary advertisement evoked overall positive feelings and emotions. Several subjects who were asked to participate in a group discussion about the advertisement, as a pilot to the present research, indicated that even though they were critical of the Bicentenary and the message and images contained within the advertisement, they could not help but feel emotionally 'stirred' in a positive direction by the commercial. This suggests the importance of the independence of affect or emotion from evaluation and appraisal in nationalist advertising. It may be this affective core which contributes to the maintenance of an image of Australian society as being united, despite its diversity of people.

So successful was this 'Celebration of a Nation' advertising campaign that O'Brien (1991) argues that the advertisement alone was primarily responsible for the change in public opinion towards the Bicentenary: from a climate of critical cynicism to a "climate of imminent celebration" (p. 294). O'Brien argues,

> "More than anything, the post-1985 public perception of the Bicentenary was conditioned by the Authority's choice of the Celebration of a Nation advertising campaign aimed squarely at the mass" (1991, p. 300).

The campaign was so successful that tracking research during the latter half of 1987 suggested that 99.3% of Australians were aware of the Bicentenary. This was a phenomenal accomplishment, given the chronic low levels of awareness and interest the Australian public had demonstrated towards the event up to that point.

Of course, the 'Celebration of a Nation' advertisement was not without critics. One journalist referred to the advertisement as 'syrupy' (J. Hay, Adelaide Advertiser, 21 Jan., 1988) and some described the song as 'jingoistic'. The advertisement was shown on John Pilger's three-part documentary series on Australia, which was shown on British television early in 1988. His comments after showing the advertisement were:

> " Like many Australians, I believe that our extraordinary country deserves much more for its Bicentenary than the latest bromide from the advertising industry - slick, acceptable images and endless displays of self congratulation by those claiming responsibility for all the glories of our history and for none of its atrocities"

He went on to say that it reminded him of an Australain beer commercial, "only flatter". Yet, despite such critical commentaries, the 'Celebration of a Nation' theme and all the media paraphernalia that went with it single-handedly ensured the success of the celebrations. Indeed, O'Brien refers to the campaign as a 'case study in communications management'.

Attitudes Towards the Bicentenary:

Consistent with the previous open-ended responses to the Bicentenary advertisement, the sample thought the major objectives of the Bicentenary were to increase people's awareness of Australia's 200 years of white history and heritage, to promote pride and patriotism and, in so doing, to unite all Australians. These received further validation as major goals of the Bicentenary by subjects' ratings on the specified questionnaire items.These three themes were also evident as the most positive features of celebrating the Bicentenary. Thus, the themes of history and heritage, nationalism and unification of people, are recurrent throughout subjects' responses and seem to form a central core around which the Bicentenary was represented. This central core is fairly consistent with the goals and objectives of the Bicentenary, which were embraced by the ABA and referred to by politicians. While these

goals do not reflect the early visionary and idealistic goals of the ABA, they do accord with the latter practical and concrete objectives of the organisers.

Furthermore, two of these themes, the unification of different people and pride and patriotism, were evaluated very highly as goals. These central themes no doubt help to evoke the predominantly positive emotions indicated by the subjects in response to the Bicentenary advertisement. That is, these three themes are probably related integrally to the affective core of the representation. However, despite the positive appraisal of unification and patriotism as goals of the Bicentenary, results indicated some discrepancies between their evaluation as goals and their perceived success.

It is not surprising that subjects who liked the Bicentenary advertisement were more likely to evaluate some of the goals and their perceived success more highly than were subjects who did not like the advertisement. Indeed, liking the advertisement was related significantly to support for the Bicentenary celebrations.

It is clear, though, that the celebrations did not receive universal or equivocal approval by the present sample. Not only did a significant number of subjects express cynical and critical views towards the celebrations in their responses but many also displayed a certain degree of ambivalence, oscillating between approval and disapproval, enthusiasm and cynicism, pride in their country and criticism of historical 'wrong-doings'. The omission of people in the advertisement or the 'unrepresentativeness' of the advertisement also found expression when prompting subjects directly to outline any negative or critical features of the Bicentenary.

The Aboriginal issue was foremost amongst criticisms of the Bicentenary. While the majority of people expressed some sympathy with Aboriginal objections to the celebrations, some subjects (N = 3: see Appendix D7) felt that Aboriginal protests and demonstrations marred and ruined the occasion. The evaluative context of these statements was markedly different and suggested that these subjects felt little sympathy towards the protest, considering it illegitimate. As mentioned previously, some subjects, paradoxically, viewed these protests as a positive feature, since it focused the nation's attention to the concerns of Aboriginal people. Furthermore, Aboriginal objections also attracted significant international

attention with the claim that Australian society was characterised by its own brand of racial apartheid (Pilger's, 1988 documentary on Australia, 'The Last Dream').

It has often been lamented by commentators of Australian social life that, except for sporting pursuits, Australians on the whole are loath to express patriotic and nationalistic feelings for their country, at least not to the same degree as do the Americans, French or English. A number of explanations have been put forward to account for this, ranging from the relatively young status of Australia as a nation to the political apathy of the 'average' Australian. The present study shows that, overall, the sample expressed significant support for the promotion of pride and patriotism in their country.

While on the surface it appears that respondents did not feel that the Bicentenary had significant personal relevance, a closer look at the responses in Table 7.5 suggests a more complex picture. While close to 49% of the sample indicated that the Bicentenary meant nothing or very little personally, and/or made negative and cynical comments in response to this question, 51.16% responded with either neutral or positive statements, mixed or ambivalent attitudes, or indicated that the event had increased their awareness of Aboriginal issues. Thus, half the sample indicated that the Bicentenary had at least some personal relevance for them, either in the way of acknowledging the stirring of at least some degree of positive emotion, or by increasing their knowledge of Australia's history and heritage, both European and Aboriginal.

While there was considerable agreement in the sample regarding the major goals of the Bicentenary, there was also considerable recognition that some of these goals fell short of being achieved. Most notable is the discrepancy between the evaluation of pride and patriotism, unification of people and awareness of black history as goals, with their perceived success. Both t-test and correlation analyses indicated schisms between the evaluation of unification and awareness of black history as goals and their perceived success. A t-test analysis indicated a similar discrepancy for patriotism, but the correlation between its evaluation as a goal and its perceived success indicated some consistency in the direction of responses. Ambivalence towards the Bicentenary was again evident, with almost half the sample uncertain about their approval of efforts to celebrate the event. Responses to this

question showed interesting and consistent differences between respondents. Subjects who approved of the Bicentenary responded to the advertisement with more positive emotion (enthusiasm, pride, inspiration) than the subjects who were opposed to the celebrations. Similarly, the opposed group responded with more negative emotion (hostility, irritability and shame) than the group in favour of the celebrations. Further consistent differences were found between these two groups of subjects in respect to the evaluation and assessment of some of the goals of the Bicentenary.

Although there was no significant relationship between support for the Bicentenary and attendance of a Bicentenary function, similar differences as those outlined above were found between subjects who had attended a Bicentenary function and those who had not participated in any of the organised celebrations. The former group of subjects expressed significantly less negative emotion (upset, guilt, and shame) in response to the advertisement than did subjects who had not participated in the celebrations. The former also evaluated more positively the goals of celebrating 200 years of European history. The significantly greater number of people who had participated in the organised celebrations in the neutral group is noteworthy, and its possible impact on results will be commented upon later.

Finally, significant and consistent differences were found between responses and voting preferences. Subjects who indicated a voting preference for the Australian Democrats and other minor parties expressed significantly more negative emotion (hostility and irritability) and less positive emotion (enthusiasm, pride, alertness and inspiration) than did subjects with Labor or Liberal voting preferences. This is not surprising, given that the Australian Democrats and some minor parties, such as The Nuclear Disarmament Party, were closely allied to and identified with Aboriginal land rights claims, as well as supporting Aboriginal objections to the celebrations. The two major political parties, on the other hand, gave bipartisan support to the concept of celebrating Australia's Bicentenary.

On one level, the advertisement was able to elicit predominantly positive affect, suggesting a 'consensus' of emotional response towards the images and the message content of the advertisement. However, at another level, the subjects demonstrated differences in opinion and approval of the celebrations. This is not surprising, given the very political and

controversial events which plagued the ABA in its efforts to stage the celebrations, and the amount of political opposition the Bicentenary received from some sections of the Australian community. Social representations theory suggests that these different orientations may be linked to significant social group differences. Indeed, if we look for consistent demographic differences in not only emotional reactions to the advertisement but also to questionnaire items, it is clear that male subjects, subjects with parents born outside Australia, and subjects with voting preferences for the minor political parties, were consistently more negative and critical of the Bicentenary.

MDS Analysis:

Overall, it remains unclear whether the different evaluative introductions to the advertisement induced any mood influences on the subjects. They certainly did not result in any experimental group differences in affective reactions to the advertisement. Given, however, the relative independence of affect and evaluation on judgement, it is possible that, while the different evaluative introductions did not produce any differences in affect, they may have resulted in differences in the evaluation of one of the dominant messages of the advertisement - unity and togetherness, i.e., similarity between different groups of people. The picture is made more complex by remembering that the image and message (theme) of unity coexisted with the image and message (theme) of diversity, i.e., difference between individuals and groups. This is made very clear by subjects' open-ended responses to the Bicentenary advertisement. The existence of marked social differences necessitates the encouragement, through the advertisement, of the social unity of Australian society.

Nevertheless, there are some indications that the evaluative introductions may have had an effect on judgements made in the MDS exercise. It was found that the neutral and negative groups' social comparisons or judgements were more 'critical' (a greater perception of difference between the groups) than were the positive group's comparisons which were more in line with the message of unity and togetherness (similarity) in the advertisement. An explanation for this may be found in the recent literature on the effects of mood on the cognitive processing of persuasive messages. Recent research suggests that positive mood

may influence processing of information in the direction of the content of the persuasive message. That is, a positive mood may induce more simplistic or heuristic processing. In comparison, a neutral mood has been found to lead to more critical elaboration of the persuasive message (Innes & Ahrens, 1989; 1991).

Given the dominant message of the Bicentenary advertisement, of unity between different groups of people, it was expected that the perceived social distance between the 12 stimulus groups would be reduced after exposure to the advertisement. This was expected to be the case for all the experimental groups compared to the standard group of comparison (psychology students not exposed to the advertisement). While the means for the positive group were smaller compared to the standard group of comparison, they were not significantly smaller. Indeed the only significant difference between the experimental groups and the standard group of comparison was that between the latter and the neutral group. It appears, therefore, that for this group of subjects simply viewing the bicentennial advertisement with no evaluative introduction increased the perception of difference between the social categories, more so than for the negative group. This paradoxical result could simply be explained by the coincidence that there were significantly more people in the neutral group who had attended a Bicentenary function, compared to subjects in the positive and negative groups. Furthermore, those who had attended a Bicentenary function were also likely to perceive the social distance between the groups as greater compared to those who had not attended one of the many activities. These subjects' actual experience of attending a Bicentenary event may have been such that it did not lead to subjective feelings of unity or 'togetherness' with disparate others. Indeed, this may have been due to the perception that those 'others' attending such a function were not that different from oneself. The tendency for subjects of higher socioeconomic status to have attended a Bicentenary event may be illustrative of this possibility.

One interesting finding which reflects the somewhat complex and contradictory themes of unity and diversity was that subjects who liked the advertisement perceived greater social distances between the 12 groups in the MDS analysis, compared to those who indicated dislike for the advertisement. Again, the perception of greater difference and diversity

between groups may have led to a greater acceptance and sympathy towards the goal of unity which the advertisement contained. Indeed, subjects who liked the advertisement rated the unification of different people, both as a clear goal of the Bicentenary and its success as a goal, more highly than those disliking the advertisement.

What is puzzling, however, is that the subjects who did not like the advertisement perceived less difference between the groups. The most common reason for disliking the advertisement, as evidenced by open-ended responses, was the unrepresentative portrayal of Australian society. This suggests that these subjects may have felt that the advertisement under-emphasised the degree of diversity and difference which actually exists in Australian society. However, this explanation is inconsistent with the perception of smaller differences between the social groups. Since subjects who disliked the advertisement indicated more negative affect towards it, a possible mood effect may have contributed not only to the way the advertisement was evaluated but also to the dissimilarity judgements made in the MDS exercise. This mood effect may have been largely independent of experimental mood manipulation, and based more on the evaluation of the advertisement. To check this possibility subjects were categorised into high and low positive mood, based on a median split of scores on the Positive Affect scale and high and low negative mood, based on a median split of scores on the Negative Affect scale. A comparison of dissimilarity means for the 66 comparisons indicated no significant difference in mean size for subjects who scored high on the Positive Affect scale (N = 20: Sum of Ranks = 105.5) compared to subjects who scored low (N = 19: Sum of Ranks = 92.5) on positive affect (Xr^2 = .63, df = 1, p > .05). However, subjects who scored high on negative affect (N = 16: Sum of Ranks = 86) perceived significantly smaller differences between the groups compared to subjects who scored low on the (N = 24: Sum of Ranks = 112) Negative Affect scale (Xr^2 = 10.24, df = 1, p < .01). Thus, subjects who did not like the advertisement, and who indicated more negative affect towards the advertisement, perceived the social groups as more similar than did subjects who liked the advertisement.

As argued previously, this finding is somewhat inconsistent with initial expectations. To gain more insight into possible reasons for this result, the demographic characteristics of the

subjects who scored high on negative affect were examined. Fifty percent (N = 8) of subjects who expressed high negative emotion indicated voting preferences for minor poltical parties, such as the Australian Democrats and Nuclear Disarmament Party; four indicated a preference for the Labor Party; three for the Liberal conservatives; and one subject was uncertain. All subjects with minor political party preferences expressed high negative emotion towards the advertisement, and all eight subjects also obtained low scores on the Positive Affect scale. In comparison, two subjects with Liberal Party preferences and one with Labor Party preferences, who obtained high negative affect scores, also obtained high positive affect scores.

The association between negative affect and political identification is consistent with other reported results. The perception of smaller differences between the social groups was therefore linked to non-mainstream political preferences; that is, an identification with parties which are characterised by their more 'radical' views about social issues related to the environment and the rights of minority groups, such as women and Aborigines. Therefore, is there something about the way in which subjects with this political preference view society and the social groups within them which can explain the relatively smaller perceived differences between the groups? Intuitively, one would expect that a political orientation left of centre would be associated with an enhanced perception of the existence of social and economic inequalities in society. This should be reflected by comparatively greater dissimilarity means in the MDS exercise than was obtained for this subgroup of subjects. However, as categorisation processes were a central feature of the MDS exercise, a possible explanation may be that a comparatively radical political orientation may be associated with a reduced tendency towards categorising or stereotyping social groups, compared to orientations which are reflective of the political mainstream. This may be motivated by a political need to regard all social groups as equal, despite the reality of inequity. Of course, this remains speculative and would need to be checked by a larger MDS study which seeks to investigate differences in societal representations and political affiliation and identification.

Conclusion:

The integral relation between the themes of unity and diversity found in this study is reminiscent of Billig's (1982) methodological and theoretical injunction to look for contradictory or countervailing themes in any ideology, social representation or social behaviour. While on the surface these themes may seem to be inconsistent, at another level they form a consistent logic via their very connection. Why, for example, did the makers of an ideological product emphasise an image and message portraying the unity and togetherness of the Australian 'people'? Perhaps because of the very nature of Australain society, which is diverse in its racial and ethnic composition.

"The existence of ambivalence as a general factor of social systems" (Billig, 1982, p. 189) is certainly a consistent thread found throughout the present study. Ambivalence towards the Bicentenary was demonstrated by many respondents who provided both negative and positive evaluations of the Bicentenary and both anti and pro attitudinal positions regarding its legitimacy. While some may view this as an argument against the central notion of consensus in social representations theory, the present author does not view Billig's notion as inconsistent with social representations theory. Consensus and agreement are more likely to be found in areas where there is tacit and culturally salient agreement on knowledge, values, and attitudes as, for example, in individualist notions of success and failure. Contradiction and ambivalence are more likely to be found in areas which are highly political and conflictual in nature.

One important factor which has not been considered in the present study is the degree to which the subjects identified with being 'Australian'; that is, their degree of patriotism or nationalism. In a recent study, Pedic (1990) found that subjects who expressed more nationalism, as measured by a scale, were more likely to be influenced by persuasive nationalistic advertisements. The possible mediating role of social identity has been a recurrent theme throughout most of this thesis. Its possible implications for the present research in particular and, more generally, for social representations research, will be considered in the concluding chapter.

Footnotes.

1. Scoring for this question was reversed from that which appears in the questionnaire to facilitate interpretation of positive correlations.

Conclusion.

This thesis has attempted to show the breadth and relevance of social representations theory by demonstrating its capacity to inform other traditions of psychological research. While conceptual connections have been made throughout this thesis between social representations theory, developmental psychology, the sociology of knowledge and aspects of sociological theory, the major emphasis has been on the relationship between this distinctly European approach and social schema and attribution theories. Both of these latter theories have achieved a dominant status within mainstream North American social psychological research. This thesis, therefore, has focused on the potential for social representations theory to contribute to mainstream social cognition models which have often been criticised for being individualistic and reductionist in nature.

It was argued in the first part of the thesis that both social schemata and representations have been conceptualised as existing knowledge structures, which guide and facilitate the processing of social information by the use of cognitive short-cuts, or heuristics. Furthermore, both schemata and representations are defined as memory traces with an internal organisational structure. Each theory emphasises not only the cognitive properties of these knowledge structures but also their evaluative and affective properties. At the same time, however, the two theories diverge significantly on the social dimension. Social representations theory views knowledge structures as being shared collectively, as originating and developing via social interaction and communication and, once created, being autonomous entities with an independent life force. In Doise's (1986) terms, social representations theory attempts to understand individual social psychological functioning by making links with societal and collective processes. That is, social representations theory attempts to locate the social and collective within the individual. By contrast, social schema theory is essentially an information processing model studied predominantly within an individualistic framework. The two theories are therefore articulated at different levels of explanation. Chapter 2 attempted a preliminary theoretical integration of these two traditions by demonstrating that social representations can provide schema theory with a much needed

social perspective, and that schema research can provide the representations tradition with a more defined and articulated cognitive perspective.

The second part of the thesis explored links between social representations theory and attribution theory. It was argued that social representations theory provides a theoretical context for determining the social origins of attributions. Attributions for everyday events and occurrences are not simply derived from individual cognitive processes, but can be located within the common stock of knowledge upon which a collectivity draws for its common-sense theories and explanations. That is, social representations, or consensual knowledge, or dominant and widespread beliefs, form the basis upon which attributions are made. The predominance of individualist or internal explanations for success and failure was explored from within this conceptual framework.

The empirical research outlined in Parts I and II of the thesis demonstrated the conceptual utility of integrating these mainstream social cognition models with social representations theory. The multidimensional scaling studies were able to elicit the internal form and organisation of cognitive representations of a sample of groups within the Australian social structure, and thereby demonstrated the schematic nature of these representations. One can see how a vertical hierarchical socioeconomic schema facilitates the encoding, processing and retrieval of information related to the constituent social groups of a society. These are the processing functions with which schema theorists have been primarily concerned. However, the studies also demonstrated the consensual and socially shared nature of these representations - themes which are central to social representations theory. A further theme which characterises the social representations approach is the group-defining nature of representations. Thus social representations are expected to differ between different social groups. Social groups are seen to define aspects of their social identity not only on the basis of their group membership but also on the basis of their particular views, attitudes and belief systems - their social representations.

There are links with other theoretical perspectives in social psychology which need to be identified, and which could help to speed a process of integrating the social schema and social representations traditions. Especially important is Tajfel's work on social identity.

Social Identity Theory and Social Representations.

Tajfel's social identity theory has been foremost in arguing that an individual's identity is defined largely by the characteristics and attributes of the social groups with which he or she identifies subjectively. Society is seen as an ensemble of different social categories of people who occupy different positions of power and status. The interrelationships between these different categories of people are not static, but change in response to historical and economic forces. Individuals can subjectively identify with, or belong to, several different social groups (such as gender, racial and religious groups). The salience of a particular individual's group memberships is determined by the situational requirements of a specific social interaction. One of the central aspects of the theory is that social categorisation (categorising people into social groups), is an inherent cognitive process which imposes order on the complex array of social information. The cognitive consequence of categorisation - stereotyping - is viewed as fulfilling an important function, in that it lends cognitive simplicity to social life. Categorising other people is always done in relation to the self. This is referred to as the process of social comparison, whereby other people are categorised as either ingroup members (similar to self) or outgroup members (different from self). The process of social comparison is seen to be largely motivated by the individual's need to maintain self- esteem. A positive self-image is achieved and maintained when intergroup comparisons are accentuated between an individual's membership group (ingroup) and another social group (outgroup). Comparisons which distinguish and set the ingroup apart from the outgroup, on the basis of positive evaluative dimensions, render the ingroup and its members with a positive social identity (Hogg & Abrams, 1988).

It has been argued, both by social identity theorists and social representations theorists, that a group's social identity is partly derived from the particular attitudes, beliefs and values which are shared by members of the group. That is, the social representations which are shared by group members contribute to the group's social cohesiveness and distinctiveness from others. Various researchers have identified the important connections between the two perspectives, though there have been only preliminary efforts at conceptual integration (e.g.,

Doise, 1986; Emler & Dickinson, 1985; Hewstone, Jaspars & Lalljee, 1982; Hogg & Abrams, 1988).

The socioeconomic differences in the 16 to 17-year-old samples' representations of the social structure, found in Chapter 4, are consistent with both the social representations perspective which predicts group differences in social representations, and social identity theory which predicts that such differences are motivated by the need to maintain a positive distinctiveness from others. The most obvious difference between the two samples was the positioning of the category 'working class' in the overall schematic representation of the groups. Students from School A (state school) positioned this category in the middle of the spatial representation closely alongside 'middle class', whereas students from School B (private school) made a clear distinction between the two class categories, placing 'working class' further down the spatial representation. It was suggested that these differences may be accounted for by some of the central tenets in social identity theory. School A students, who came from predominantly working class backgrounds, may have been motivated to perceive close similarities between the two class categories in order to maintain a positive social identity, unlike students from School B who would not have been motivated by such concerns, given their higher socioeconomic status. It was also suggested that such class differences need to be investigated in adult respondents to see whether, indeed, it is a generalisable and robust class difference in representations of the social structure.

It was argued that one of the shortcomings of the MDS studies was the lack of data related to the samples' subjective social group identifications. While this was incorporated into the adult study, the younger age samples were simply classified in terms of their objective class status. In order to investigate more thoroughly the possible links representations of society may have with social identity, one could conduct a similar MDS study using the same 12 social groups but, in addition, add the category of 'self' or 'myself' so that comparisons are made between the person's own self definition with all of the remaining social groups. Dissimilarity ratings between the category of 'self' and all the social groups would lead to a spatial representation of the social structure which incorporates measures of subjective social identifications. If it were found, for example, that the overall

group representation for a working class sample yielded a representation whereby the 'self' was positioned closely to the categories of working class and middle class, with little differentiation between the latter two class categories, then this would suggest that the representation of the social structure is motivated and/or mediated by social identity processes. Similar hypotheses could be advanced for the middle class sample. Such a procedure would extend the analysis adopted in this thesis and allow for an investigation into the possible connections with social identity processes.

The lack of data referring to subjective group identifications was also identified as a shortcoming of the intergroup attribution study. Data of this nature would have made clearer the possible connections with social identity processes when making attributional judgements for academic success and achievement. The absence of school differences in this study may reflect the fact that either: (1) students in both schools may have identified themselves as members of the 'middle class', referring to a sizable majority of people and therefore as members of an 'ingroup'; or (2) students from the state school may have identified with the 'working class' category but equated this as being more similar to the 'middle class' category than the social categories positioned at the bottom of the social structure - the outgroups (Aborigines, unemployed, refugees and migrants). Whatever the possible reasons, it is clear that data referring to subjective group identifications may have aided interpretation of some results. Such data would also have provided more direct evidence regarding which of the groups were perceived as 'outgroups' and which were perceived as 'ingroups', rather than relying only on a post hoc interpretation of the spatial representation of the social groups. Again, this may have led to more qualitative insights into the ingroup-outgroup attributional analyses which were performed.

Social identity may also have been an important mediating influence in the last study on representations of Australian society associated with the Bicentenary celebrations. Tajfel's theory would predict that individuals who identify strongly with being 'Australian', would have responded differentially to the 'Celebration of a Nation' advertisement and, generally, may have been more supportive of the celebrations than would subjects for whom being 'Australian' is a less important feature of their social identity. Incorporating a measure of

'nationalism' may have served to differentiate subjects on their strength of social identification with being 'Australian'. The degree to which people see themselves as 'Australian' may be a particularly important feature of social identity within a pluralist and multicultural society such as Australia's.

Social Representations of Australian Society.

The empirical work in this thesis has uncovered aspects and features of social representations of Australian society. Chapter 7 detailed the representations of Australian society which makers of a cultural product emphasised in order to encourage Australian national sentiment. These representations were structured around the themes of the unity and diversity of Australian society. It was argued that these themes are contradictory but also logically connected.

The MDS procedure yielded schematic representations of the 'social order' which exists within Ausrtralian society. The salience and importance which subjects attached to the socioeconomic structure within Australia are perhaps not surprising, given the imperatives of capitalist production and ideology. Most subjects were able to differentiate clearly between groups on the basis of wealth, power, success and education. Status differentials between social groups are clearly and evidently perceived as early as age 13 to 14 years of age. This is not surprising, given the number of studies which find that knowledge of status differentials begin at even earlier ages amongst children in general (Emler & Dickinson, 1985; Stacey, 1982), including Australian children (Connell, 1971; Davies, 1965). Furthermore, the research in this thesis has pointed to other possible features of societal representations, most notably the categorisation of social groups along an agentic-communal distinction, and the historically-specific nature of societal representations.

This thesis has also traced the developmental paths which such representations take in adolesence and early adulthood and has demonstrated the consensually shared nature of these societal representations.

In addition , the research in this thesis has shown that differential attributions for academic achievement and failure are made for different social groups within society.

Essentially, those at the lower end of the socioeconomic hierarchy are perceived as being more subject to external forces, such as luck and fate, while people at the higher end of the scale are seen to contribute more directly to their success and failure by either their own efforts or talents. Overall, however, there was a strong tendency to attribute failure and success to internal factors, regardless of the actor's social category membership. This tendency was more marked for the older students than for the younger students, suggesting that individualist attributions for success and failure increase over the period of adolescent development. Thus this thesis has demonstrated that attributions for success and failure are based predominantly on dominant and widespread consensual representations in Australian society regarding the primacy of individual ability and effort in academic achievement.

The aim of this thesis was not simply to uncover the objectively projected social representations of Australian society (as contained within the 'Celebration of a Nation' advertisement), nor just to elicit the social representations of Australian society 'in the minds' of the subjects who took part in the research. It also attempted to make useful theoretical connections between social representations theory and dominant social cognition approaches. The integrative theoretical approach undertaken in this thesis was motivated by Tetlock and Manstead's (1985) following recommendation,

> "Instead of adding to [the] proliferation of minitheories, researchers should focus on those fundamental principles of psychological functioning that have the potential to unify and organise the sprawling mass of research findings within one theoretical framework" (pp. 59-77).

It is hoped that this thesis has contributed to this objective by its prelimianry efforts to unify aspects of social representations theory with mainstream social cognition models.

Appendix A
Appendix to Chapter 3

Appendix A1

<u>Multidimensional Scaling Questionnaire for Year 9 Sample.</u>

<u>Sex:</u>   Male / Female

<u>Date of Birth:</u>

<u>Father's Occupation:</u>

<u>Mother's Occupation:</u>

<u>House Number:</u>

We all know that our society is made up of different groups of people. In the space below write down what you think are the main groups of people that make up our society.

During this exercise you will be judging how similar or different a number of groups are. You will be comparing them two at a time. For us to know how similar or different you find each pair to be, we will have you mark a form for us (Pass forms around).

You can see that on the form there is a line with the words 'same' at one end and 'different' at the other. If you find no difference between the two groups make a mark at the end of the line by 'same'. If you find there is a difference make a mark somewhere along the line showing how much difference you find.

One thing we would like you to remember is that different people judge things in different ways. This means that there are no right or wrong answers. Two stimuli that are very similar to one person may be quite different to another. Both results are important to us. We are interested in finding out how you as an individual compare these stimuli.

Let's now practice marking these forms, and then see if you have any questions. Imagine you are comparing four fruits: oranges, lemons, mandarines, and grapefruits. We are going to ask you to compare them two at a time. There will be six pairs in all. You should have six forms in front of you stapled together. Use one form for each pair. Remember all you have to do is to make a mark on the line showing how similar or different you feel each pair to be. Allow about 15 seconds between each pair. Any questions?

lemons
grapefruit

same _____ different

The following instructions were read out. They did not form part of the questionnaire.

During this exercise you will be comparing social groups within our society two at a time. The name of the two groups to be compared appears on the left hand side of the page. The first group is positioned above the second like so (indicate on blackboard). You will be comparing 12 different social groups with each other. These groups are:

upper class
aborigines
middle class
trade unions
politicians
working class
migrants
unemployed
refugees
men
big business
women

There are 66 comparisons - one appearing on each page of the questionnaire. Make sure you do not miss any of the 66 comparisons. It is important that you do every one. Remember, there are no right or wrong answers: we are interested in how you as an individual see these groups. Any questions?

upper class
middle class

same _____different

unemployed
aborigines

same _____different

Appendix A2: Adult MDS Questionnaire.

Before beginning this exercise could you please provide us with the following information:

SEX: Male/ Female

DATE OF BIRTH:

FATHER'S OCCUPATION:

MOTHER'S OCCUPATION:

Please place a tick alongside the group(s) of which you regard yourself a member.

women
men
politicians
aborigines
refugees
migrants
unemployed
trade unions
big business
working class
middle class
upper class
small business
welfare recipients
farmers
professionals/ executives
blue-collar workers
white-collar workers
multinational corporations
home-owners

During this exercise you will be judging how similar or different a number of groups are from each other. You will be comparing these groups two at a time along a broken line marked with the words 'same' at one end and 'different' at the other. If you find no difference between the two groups place a tick above the portion of the broken line closest to the 'same' end. E.g.,

mandarines: oranges

Same   Different

  0   1   2   3   4   5   6   7

If you find there is a difference, place a tick above the broken line showing how much difference you find. E.g.,

mandarines: oranges

Same   Different

  0   1   2   3   4   5   6   7

We would like you to remember that different people judge things in different ways. This means that there are no right or wrong answers. Two groups that are very similar to one person may be quite different to another. Both views are important. We are interested in finding out how you as an individual compare these groups.

same   different

aborigines : blue-collar workers

0	1	2	3	4	5	6	7

women : men

0	1	2	3	4	5	6	7

middle class : women

0	1	2	3	4	5	6	7

refugees : blue-collar workers

0	1	2	3	4	5	6	7

professionals/executives : politicians

0	1	2	3	4	5	6	7

professionals/executives : aborigines

0	1	2	3	4	5	6	7

trade unions : unemployed

0	1	2	3	4	5	6	7

upper class : big business

0	1	2	3	4	5	6	7

big business : refugees

0	1	2	3	4	5	6	7

working class : welfare recipients

0	1	2	3	4	5	6	7

women : blue-collar workers

0	1	2	3	4	5	6	7

small business : welfare recipients

0	1	2	3	4	5	6	7

trade unions : refugees

0	1	2	3	4	5	6	7

                                         same   different

white-collar workers : farmers

       0   1   2   3   4   5   6   **7**

middle class : migrants

       0   1   2   3   4   5   6   7

aborigines : small business

       0   1   2   3   4   5   6   7

men :   professionals/executives.

       0   1   2   3   4   5   6   7

farmers : blue-collar workers

       0   1   2   3   4   5   6   7

home-owners : welfare recipients

       0   1   2   3   4   5   6   7

migrants : farmers

       0   1   2   3   4   5   6   7

middle class : trade unions

       0   1   2   3   4   5   6   7

multinational corporations : men

       0   1   2   3   4   5   6   7

politicians : white-collar workers

       0   1   2   3   4   5   6   7

farmers : refugees

       0   1   2   3   4   5   6   7

professionals/executives : farmers

       0   1   2   3   4   5   6   7

aborigines : white-collar workers

       0   1   2   3   4   5   6   7

	same							different
upper class : trade unions	0	1	2	3	4	5	6	7
women : big business	0	1	2	3	4	5	6	7
refugees : white-collar workers	0	1	2	3	4	5	6	7
politicians : trade unions	0	1	2	3	4	5	6	7
small business : farmers	0	1	2	3	4	5	6	7
farmers : unemployed	0	1	2	3	4	5	6	7
middle class : home-owners	0	1	2	3	4	5	6	7
politicians : working class	0	1	2	3	4	5	6	7
aborigines : farmers	0	1	2	3	4	5	6	7
working class : upper class	0	1	2	3	4	5	6	7
politicians : middle class	0	1	2	3	4	5	6	7
aborigines : middle class	0	1	2	3	4	5	6	7
small business : middle class	0	1	2	3	4	5	6	7

                                                    same   different

unemployed : home-owners

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

multinational corporations : welfare

                              recipients   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

working class : blue-collar workers

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

politicians : women

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

white-collar workers : unemployed

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

white-collar workers : multinational

                              corporations   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

welfare recipients : refugees

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

welfare recipients : unemployed

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

professionals/executives : migrants

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

men : aborigines

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

middle class : white-collar workers

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

unemployed : small business

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

migrants : politicians

                                                    ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾   ‾‾
                                                     0   1   2   3   4   5   6   7

same   different

upper class : professionals/executives

      0   1   2   3   4   5   6   7

refugees : middle class

      0   1   2   3   4   5   6   7

big business : aborigines

      0   1   2   3   4   5   6   7

home-owners : professionals/executives

      0   1   2   3   4   5   6   7

professionals/executives : small business

      0   1   2   3   4   5   6   7

working class : big business

      0   1   2   3   4   5   6   7

white-collar workers : blue-collar workers

      0   1   2   3   4   5   6   7

professionals/executives : welfare recipients

      0   1   2   3   4   5   6   7

politicians : unemployed

      0   1   2   3   4   5   6   7

middle class : working class

      0   1   2   3   4   5   6   7

refugees : unemployed

      0   1   2   3   4   5   6   7

home owners : small business

      0   1   2   3   4   5   6   7

professionals/executives : blue-collar
                               workers

      0   1   2   3   4   5   6   7

same   different

aborigines : unemployed

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

blue-collar workers : politicians

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

trade unions : women

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

women : white-collar workers

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

white-collar workers : small business

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

small business : upper class

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

trade unions : small business

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

blue-collar workers : middle class

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

politicians : men

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

men : middle class

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

farmers : working class

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

multinational corporations : farmers

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

blue-collar workers : small business

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

	same							different
migrants : big business	0	1	2	3	4	5	6	7
women : professionals/executives	0	1	2	3	4	5	6	7
migrants : white-collar workers	0	1	2	3	4	5	6	7
home-owners : working class	0	1	2	3	4	5	6	7
migrants : home-owners	0	1	2	3	4	5	6	7
unemployed : professionals/executives	0	1	2	3	4	5	6	7
aborigines : working class	0	1	2	3	4	5	6	7
home-owners : blue-collar workers	0	1	2	3	4	5	6	7
aborigines : women	0	1	2	3	4	5	6	7
women : migrants	0	1	2	3	4	5	6	7
blue-collar workers : migrants	0	1	2	3	4	5	6	7
welfare recipients : migrants	0	1	2	3	4	5	6	7
unemployed : blue-collar workers	0	1	2	3	4	5	6	7

same   different

refugees : professionals/executives

   0   1   2   3   4   5   6   7

unemployed : working class

   0   1   2   3   4   5   6   7

farmers : home-owners

   0   1   2   3   4   5   6   7

multinational corporations : women

   0   1   2   3   4   5   6   7

welfare recipients : big business

   0   1   2   3   4   5   6   7

women : home-owners

   0   1   2   3   4   5   6   7

blue-collar workers : upper class

   0   1   2   3   4   5   6   7

trade unions : welfare recipients

   0   1   2   3   4   5   6   7

aborigines : refugees

   0   1   2   3   4   5   6   7

aborigines : home-owners

   0   1   2   3   4   5   6   7

big business : politicians

   0   1   2   3   4   5   6   7

men : home-owners

   0   1   2   3   4   5   6   7

aborigines : migrants

   0   1   2   3   4   5   6   7

	same						different

middle class : upper class

0   1   2   3   4   5   6   7

aborigines : politicians

0   1   2   3   4   5   6   7

small business : men

0   1   2   3   4   5   6   7

home-owners : white-collar workers

0   1   2   3   4   5   6   7

big business : trade unions

0   1   2   3   4   5   6   7

refugees : politicians

0   1   2   3   4   5   6   7

refugees : home-owners

0   1   2   3   4   5   6   7

upper-class : refugees

0   1   2   3   4   5   6   7

men : welfare recipients

0   1   2   3   4   5   6   7

upper class : multinational corporations

0   1   2   3   4   5   6   7

refugees : men

0   1   2   3   4   5   6   7

farmers : trade unions

0   1   2   3   4   5   6   7

upper class : white-collar workers

0   1   2   3   4   5   6   7

same   different

big business : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

upper class : politicians

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

white-collar workers : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

home-owners : multinational corporations

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

aborigines : upper class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

refugees : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

small business : politicians

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

middle class : farmers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

migrants : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

welfare recipients : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

professionals/executives : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

men : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

women : upper class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

same   different

welfare recipients : women

0   1   2   3   4   5   6   7

refugees : women

0   1   2   3   4   5   6   7

migrants : working class

0   1   2   3   4   5   6   7

white-collar workers : big business

0   1   2   3   4   5   6   7

farmers : welfare recipients

0   1   2   3   4   5   6   7

migrants : refugees

0   1   2   3   4   5   6   7

big business : multinational corporations

0   1   2   3   4   5   6   7

politicians : welfare recipients

0   1   2   3   4   5   6   7

aborigines : welfare recipients

0   1   2   3   4   5   6   7

big business : blue-collar workers

0   1   2   3   4   5   6   7

multinational corporations : politicians

0   1   2   3   4   5   6   7

small business : women

0   1   2   3   4   5   6   7

working class : men

0   1   2   3   4   5   6   7

| | same | | | | | | | different |

upper class : farmers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

working class : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

refugees : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

men : trade unions

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

professionals/executives : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

multinational corporations : trade unions

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

migrants : trade unions

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

men : white-collar workers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

women : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

big business : unemployed

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

men : farmers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

multinational corporations : professionals/executives

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

upper class : migrants

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

trade unions : home-owners

0   1   2   3   4   5   6   7

unemployed : men

0   1   2   3   4   5   6   7

multinational corporations : working class

0   1   2   3   4   5   6   7

blue-collar workers : welfare recipients

0   1   2   3   4   5   6   7

upper class : unemployed

0   1   2   3   4   5   6   7

professionals/executives : working class

0   1   2   3   4   5   6   7

farmers : politicians

0   1   2   3   4   5   6   7

men : blue-collar workers

0   1   2   3   4   5   6   7

multinational corporations : refugees

0   1   2   3   4   5   6   7

white-collar workers : trade unions

0   1   2   3   4   5   6   7

aborigines : trade unions

0   1   2   3   4   5   6   7

big business : farmers

0   1   2   3   4   5   6   7

upper class : men

0   1   2   3   4   5   6   7

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same   different

multinational corporations : middle class

                    0   1   2   3   4   5   6   7

upper class : welfare recipients

                    0   1   2   3   4   5   6   7

upper class : home-owners

                    0   1   2   3   4   5   6   7

middle class : big business

                    0   1   2   3   4   5   6   7

women : unemployed

                    0   1   2   3   4   5   6   7

multinational corporations : unemployed

                    0   1   2   3   4   5   6   7

migrants : unemployed

                    0   1   2   3   4   5   6   7

home-owners : big business

                    0   1   2   3   4   5   6   7

small business : multinational corporations

                    0   1   2   3   4   5   6   7

multinational corporations : blue-collar
                          workers
                    0   1   2   3   4   5   6   7

men : migrants

                    0   1   2   3   4   5   6   7

migrants : multinational corporations

                    0   1   2   3   4   5   6   7

trade unions : working class

                    0   1   2   3   4   5   6   7

                                        same   different

welfare recipients : white-collar workers

      0   1   2   3   4   5   6   7

blue-collar workers : trade unions

      0   1   2   3   4   5   6   7

politicians : home-owners

      0   1   2   3   4   5   6   7

unemployed : middle class

      0   1   2   3   4   5   6   7

farmers : women

      0   1   2   3   4   5   6   7

trade unions : professionals/executives

      0   1   2   3   4   5   6   7

professionals/executives : white-collar
                                 workers

      0   1   2   3   4   5   6   7

aborigines : multinational corporations

      0   1   2   3   4   5   6   7

Appendix A3

<u>Attribute Rating Scales for Year 9 Sample.</u>

In the final section of the questionnaire we would like you to rate these social groups along a number of different rating scales. On the top left hand corner of each page appears the name of the group which you will be judging. The group name is underlined. Below the group name are 5 separate lines. Each line is labelled with an adjective on the left hand side, and the adjective's opposite on the right (indicate on first page). We would like you to indicate how you feel about each group in respect to each adjective and its opposite by placing a mark somewhere along each line. Once again, remember, that there are no right or wrong answers and that different people will judge the groups differently. We are interested in how you as an individual judge the groups. Any questions?

<u>unemployed</u>

active   passive

_____

wise   foolish

_____

important   unimportant

_____

independent   dependent

_____

rich   poor

_____

<u>unemployed</u>

strive to do
well

do not strive
to do well

_____

sensitive

insensitive

_____

competitive

cooperative

_____

stingy

generous

_____

vote for
Labor Party

vote for
Liberal Party

_____

unemployed

excitable _____ calm

friendly _____ unfriendly

happy _____ unhappy

educated _____ uneducated

intelligent _____ not intelligent

<u>unemployed</u>

powerful _____ weak

successful _____ unsuccessful

respect
authority _____ do not respect
authority

interesting _____ boring

work hard _____ lazy

Appendix A4

Averaged Dissimilarity Matrix for Year 9 Sample

059
065 046
053 058 106
053 063 104 047
070 060 104 062 042
054 054 116 040 046 044
058 046 075 094 092 088 093
067 046 023 107 106 093 121 034
032 027 071 080 089 064 115 043 072
052 042 083 077 093 069 091 057 074 043
054 045 022 103 110 094 115 078 028 087 080

Converted Dissimilarity Matrix for Year 9 Sample

3.30
3.61 2.39
2.83 3.17 6.00
2.87 3.52 5.87 2.83
3.91 3.13 5.91 3.35 2.17
2.91 2.96 6.52 2.09 2.39 1.00
3.22 2.35 4.13 5.35 5.17 5.04 5.22
3.78 2.48 1.04 6.04 5.87 5.13 6.78 2.87
1.57 1.35 3.83 4.30 5.04 3.48 6.44 2.35 4.09
2.83 2.04 4.74 4.17 5.17 3.83 5.04 3.09 4.13 2.26
2.87 2.44 0.96 5.70 6.13 5.17 6.35 4.26 1.39 4.91 4.48

Averaged Dissimilarity Matrix for Psychology III Sample

5.17
4.04 2.42
3.79 3.50 5.67
3.71 3.38 6.00 3.75
3.88 3.21 5.54 4.29 2.42
3.96 3.13 6.58 1.96 1.63 3.00
4.71 1.92 4.38 5.42 5.79 4.38 4.79
4.38 2.58 2.04 6.42 6.46 4.92 5.83 4.04
4.00 2.96 5.83 2.67 2.13 2.46 3.42 1.65 5.54
3.75 3.38 4.29 5.58 5.29 4.17 4.96 4.54 3.75 5.33
3.17 3.42 2.25 6.04 6.13 5.00 6.33 5.67 2.38 6.33 4.92
3.38 2.88 5.00 5.71 4.00 2.96 5.92 9.21 5.38 3.38 2.46 4.25
3.63 3.79 6.46 1.54 1.50 2.58 0.96 4.25 6.38 3.46 4.83 6.46 5.67
4.42 1.83 4.75 5.88 5.46 4.96 5.00 4.83 3.83 3.38 2.88 4.25 2.88 4.67
3.00 3.00 2.25 6.29 6.46 5.00 6.38 4.92 1.33 5.71 3.29 1.00 3.83 6.63 4.88
4.00 2.71 5.71 4.75 4.54 2.79 3.67 2.21 5.46 1.29 4.21 5.79 3.33 3.33 4.25 5.58
3.33 2.96 2.75 5.75 5.46 4.54 5.54 4.54 2.63 4.88 2.21 3.00 3.42 5.50 4.96 1.63 5.13
4.42 2.88 2.67 6.04 6.38 5.50 6.25 4.13 0.88 5.54 4.04 2.25 5.63 6.67 4.67 1.29 5.29 2.88
3.54 2.96 2.88 5.54 5.67 3.75 5.67 6.04 3.29 4.17 1.71 1.71 2.75 5.79 2.00 1.50 4.00 1.92 4.67

Appendix A5: <u>Means and Standard Deviations for Attribute Ratings, Year 9</u>

	<u>Wom</u>	<u>Men</u>	<u>Pol</u>	<u>Abor</u>	<u>Ref</u>	<u>Mig</u>	<u>Unempl</u>	<u>TU</u>	<u>BB</u>	<u>WC</u>	<u>MC</u>	<u>UC</u>
Rich [M]	63.22	55.87	12.57	96.17	99.70	77.39	108.48	57.35	11.91	68.09	57.91	16.13
[SD]	25.48	18.95	19.18	35.94	28.94	33.40	27.44	29.37	12.79	30.74	19.17	25.94
Work hard	32.44	38.91	70.00	89.61	77.39	60.48	103.65	59.00	37.78	13.30	47.91	76.65
	34.93	40.13	48.83	37.84	40.84	35.64	34.74	34.49	40.13	27.58	29.02	42.90
Active	36.44	49.09	80.00	63.61	82.26	51.26	80.04	26.65	43.09	16.74	37.57	89.83
	42.86	47.96	43.38	51.85	41.87	31.06	46.07	27.08	38.14	18.87	23.19	38.90
Wise	32.83	63.61	46.61	67.13	77.30	66.52	91.96	49.70	35.39	45.04	44.13	37.70
	36.24	41.76	39.16	47.08	41.83	28.32	30.93	32.71	29.83	31.27	23.09	31.68
Respect	25.57	49.22	43.74	86.22	89.04	58.26	95.35	53.00	38.70	26.35	32.91	45.17
Authority	31.32	33.65	51.30	37.24	38.63	36.01	36.02	37.40	40.87	24.57	22.85	41.12
Interesting	36.09	40.87	84.65	73.04	85.44	65.04	93.48	67.48	51.30	39.65	48.13	91.04
	38.34	39.43	51.16	48.33	89.53	34.29	45.48	36.85	44.87	31.89	25.06	36.37
Powerful	47.00	38.48	15.13	90.89	101.91	75.26	118.61	33.00	12.17	60.22	53.80	16.74
	38.25	40.11	29.61	37.85	38.64	34.59	14.86	33.32	19.04	41.20	20.26	25.33
Successful	34.13	37.52	11.91	94.61	101.65	69.48	118.65	46.39	10.39	53.78	50.26	13.61
	35.36	36.05	18.41	39.03	35.84	37.75	17.62	40.82	16.12	39.10	24.18	16.14
Important	25.26	39.78	43.87	65.78	89.30	75.13	89.52	38.52	25.91	37.96	48.26	35.30
	33.92	42.23	42.57	44.36	32.74	32.07	37.91	36.58	26.22	34.74	24.94	31.18
Independent	40.00	57.48	69.09	58.65	93.70	63.57	77.26	53.35	61.09	51.22	52.87	62.96
	45.83	44.47	42.34	47.23	41.64	38.68	48.50	40.05	43.40	42.33	36.05	37.12
Strive to do	20.22	34.83	29.70	75.74	59.44	53.52	101.83	29.83	25.35	12.65	39.39	65.48
Well	35.48	42.05	41.83	46.42	48.19	42.91	37.32	26.31	27.34	17.95	30.54	48.90
Sensitive	26.70	56.09	83.91	87.89	62.65	49.70	64.13	54.80	60.74	37.39	38.00	63.26
	41.92	48.52	44.25	49.35	46.27	39.61	52.56	45.13	51.02	42.79	22.48	47.86

Table Continued

Competitive	63.87	53.70	20.00	67.09	73.30	76.52	92.17	37.30	19.39	69.87	60.96	27.22
	50.43	45.81	36.09	42.68	43.50	41.60	41.57	35.32	29.05	51.16	37.65	33.57
Stingy	87.61	75.09	30.04	50.13	46.13	73.48	61.48	50.83	39.83	87.61	75.48	26.83
	41.99	45.45	40.65	47.85	37.41	40.71	50.14	41.70	34.89	41.23	30.33	36.70
Vote for Labor	71.52	47.83	61.52	58.96	56.83	61.96	56.48	52.22	60.35	44.39	59.61	65.87
	32.70	27.95	23.22	34.50	31.79	31.60	45.49	37.82	42.72	37.99	36.38	39.85
Exciting	38.52	19.44	62.13	80.48	77.96	68.83	71.96	53.09	78.87	46.87	55.91	45.89
	43.89	31.07	50.39	45.41	38.69	37.54	43.15	34.11	45.55	35.32	30.63	33.97
Friendly	18.70	20.83	78.57	86.57	81.96	60.65	73.87	76.74	62.04	26.13	32.04	80.39
	30.13	29.14	41.25	44.88	39.80	36.06	43.05	36.10	36.28	26.10	26.66	31.87
Happy	19.13	20.48	62.87	88.09	92.26	57.78	94.87	76.83	60.48	34.30	36.44	52.39
	30.92	27.52	48.77	41.08	36.02	37.76	40.86	35.60	37.00	35.85	29.39	36.48
Educated	17.29	12.54	18.38	102.00	97.30	79.04	103.13	58.61	34.87	37.61	31.57	22.35
	36.58	29.01	35.98	34.28	35.62	36.61	29.46	42.55	42.31	35.03	23.08	32.41
Intelligent	28.39	28.26	41.83	96.83	93.96	70.61	100.96	64.96	82.35	48.48	40.26	35.87
	36.00	34.85	47.05	38.90	32.71	37.48	30.25	38.66	35.62	37.05	30.80	34.61

Appendix A6:

Year 9 Subject Weights for Dimensions 1 & 2

Subject	Dimension 1	Dimension 2
1	0.15	0.17
2	0.58	0.19
3	0.03	0.49
4	0.34	0.09
5	0.60	0.22
6	0.10	0.49
7	0.33	0.21
8	0.27	0.21
9	0.28	0.37
10	0.45	0.30
11	0.64	0.15
12	0.37	0.40
13	0.63	0.39
14	0.53	0.46
15	0.62	0.28
16	0.69	0.03
17	0.55	0.21
18	0.24	0.22
19	0.48	0.38
20	0.37	0.36
21	0.21	0.12
22	0.21	0.39
23	0.33	0.56

Adult Subject Weights and Normalised Weights for Dimensions 1 & 2
for 12 Stimulus Groups. * Denotes Male Subjects.

	Subject Weights			Normalised Subject Weights	
Subject	Dimension 1	Dimension 2	Vector Length	Dimension 1	Dimension 2
1*	0.58	0.36	.6826	0.84	0.53
2	0.61	0.31	.6843	0.89	0.45
3	0.61	0.31	.6843	0.89	0.45
4	0.49	0.34	.5964	0.82	0.57
5	0.52	0.51	.7284	0.71	0.70
6*	0.71	0.40	.8684	0.82	0.46
7*	0.55	0.42	.6920	0.79	0.60
8*	0.74	0.28	7912	0.94	0.35
9	0.49	0.21	.5331	0.92	0.39
10	0.56	0.31	.6400	0.87	0.48
11*	0.79	0.26	.8317	0.95	0.31
12	0.51	0.31	.5968	0.85	0.52
13	0.63	0.40	.7463	0.84	0.54
14	0.38	0.37	.5304	0.72	0.70
15	0.56	0.44	.7122	0.79	0.62
16	0.60	0.32	.6800	0.88	0.47
17	0.83	0.24	.8640	0.96	0.28
18	0.57	0.44	.7201	0.79	0.61
19	0.65	0.40	.7632	0.85	0.52
20	0.66	0.42	.7823	0.84	0.54
21*	0.61	0.21	.6451	0.95	0.33
22*	0.64	0.30	.7068	0.91	0.42
23*	0.80	0.10	.8062	0.99	0.12
24	0.66	0.30	.7250	0.91	0.41

ANAVA Table for Gender Differences in Adult Subject Weights, 12 Stimulus Groups.

Source	SS	DF	MS	F
Between Groups	.44	2	.22	1.52
Within Groups	3.20	22	.146	
Total	3.65	24		

Adult Subject Weights for Dimensions 1, 2 & 3 for 20 Stimulus Groups

Subject	Dimension 1	Dimension 2	Dimension 3
1	0.51	0.27	0.32
2	0.36	0.41	0.37
3	0.38	0.33	0.36
4	0.43	0.27	0.25
5	0.41	0.42	0.20
6	0.47	0.34	0.42
7	0.34	0.38	0.33
8	0.57	0.24	0.38
9	0.50	0.28	0.24
10	0.44	0.31	0.15
11	0.74	0.27	0.08
12	0.42	0.27	0.33
13	0.36	0.33	0.42
14	0.26	0.20	0.41
15	0.50	0.32	0.19
16	0.43	0.26	0.35
17	0.63	0.30	0.31
18	0.32	0.50	0.32
19	0.43	0.43	0.30
20	0.48	0.32	0.30
21	0.62	0.10	0.28
22	0.57	0.29	0.24
23	0.69	0.26	0.18
24	0.50	0.34	0.32

Appendix A7

Rank Ordering of SDs between Year 9 and Adult Sample.

Pairs	Year 9	Rank	Adult	Rank
1.	3.01	2	2.26	1
2.	2.25	2	1.73	1
3.	2.41	2	1.72	1
4.	2.61	2	2.02	1
5.	2.74	2	1.67	1
6.	1.35	2	1.13	1
7.	2.70	2	1.94	1
8.	2.39	2	1.64	1
9.	2.14	2	1.25	1
10	3.04	2	2.71	1
11.	2.58	2	1.51	1
12.	2.85	2	1.59	1
13.	1.78	2	1.56	1
14.	2.72	2	2.60	1
15.	2.77	2	1.95	1
16.	2.54	2	1.57	1
17.	2.44	2	1.65	1
18.	1.34	2	1.02	1
19.	2.28	2	1.68	1
20.	2.55	2	1.31	1
21.	1.38	1	1.79	2
22.	2.45	2	1.63	1
23.	2.08	2	1.77	1
24.	2.16	2	1.99	1
25.	2.01	2	1.61	1
26.	2.25	2	1.44	1
27.	1.87	2	1.84	1
28.	1.93	2	1.87	1
29.	2.34	2	1.66	1
30.	2.19	2	1.61	1
31.	1.82	1	2.01	2
32.	1.67	2	0.97	1
33.	1.98	2	0.66	1
34.	2.34	2	1.64	1
35.	0.67	1	1.37	2
36.	2.49	2	2.20	1
37.	1.81	2	1.53	1
38.	1.75	2	1.63	1
39.	2.59	2	1.47	1
40.	2.64	2	1.81	1
41.	1.92	2	1.51	1
42.	2.27	2	1.38	1
43.	1.38	1	1.77	2
44.	1.92	2	1.06	1
45.	2.30	2	1.14	1
46.	2.13	2	1.89	1
47.	1.87	2	1.66	1
48.	2.12	1	2.14	2
49.	2.52	2	1.35	1

Table Continued

50.	2.02	2	1.37	1
51.	2.52	2	1.86	1
52.	2.25	2	1.43	1
53.	2.41	2	1.93	1
54.	1.82	2	1.73	1
55.	1.91	2	1.69	1
56.	2.38	2	1.61	1
57.	1.97	2	1.86	1
58.	1.26	1	2.11	2
59.	1.87	2	1.16	1
60.	1.60	2	1.19	1
61.	2.10	2	1.62	1
62.	1.77	2	0.82	1
63.	2.28	2	1.40	1
64.	2.48	2	2.10	1
65.	2.31	2	1.13	1
66.	1.88	2	1.82	1

Sum of Ranks   126   70

Appendix B

Appendix to Chapter 4

Appendix B1: MDS Questionnaire for Year 9 and 12 Samples

During this exercise you will be judging how similar or different a number of groups are from each other. You will be comparing these groups two at a time along a broken line marked with the words 'same' at one end and 'different' at the other. If you find no difference between the two groups place a tick above the portion of the broken line closest to the 'same' end. E.g.,

softball : baseball   Same   different

0   1   2   3   4   5   6   7   8

If you find there is a difference, place a tick above the broken line showing how much difference you find. Eg.,

softball : baseball   Same   different

0   1   2   3   4   5   6   7   8

We would like you to remember that different people judge things in different ways. This means that there are no right or wrong answers. Two groups that are very similar to one person may be quite different to another. Both views are important. We are interested in finding out how you as an individual compare these groups.

Before we begin the main exercise let's practice by
comparing pairs of fruits. Imagine your are
comparing four fruits: oranges, lemons,
mandarines, and grapefruits. We are going to ask
You to compare them two at a time. There will be
six pairs in all. Remember all you have to do is to
place a tick above the section of the broken line
showing how similar or different you feel each pair
to be. Any questions?

lemons : grapefruit   Same   different

   0   1   2   3   4   5   6   7   8

mandarines : oranges   Same   different

   0   1   2   3   4   5   6   7   8

grapefruit : mandarines   Same   different

   0   1   2   3   4   5   6   7   8

oranges : grapefruit   Same   different

   0   1   2   3   4   5   6   7   8

lemons : oranges   Same   different

   0   1   2   3   4   5   6   7   8

mandarines : lemons   Same   different

   0   1   2   3   4   5   6   7   8

BEFORE YOU BEGIN THE QUESTIONNAIRE PLEASE FILL IN THE FOLLOWING INFORMATION:

DATE OF BIRTH:

SEX: Male/ Female

FATHER'S OCCUPATION:

MOTHER'S OCCUPATION:

During this exercise you will be comparing social groups within our society two at a time. You will be comparing 12 different social groups with each other. These groups are:

1. the upper-class
2. aborigines
3. trade unions
4. politicians
5. the working-class
6. migrants
7. the unemployed
8. refugees
9. men
10. big business
11. women
12. the middle-class

There are 66 comparisons - 11 on each page of the questionnaire. Make sure you do not miss any of the comparisons. It is important that you do everyone. Remember, there are no right or wrong answers. We are interested in how you, as an individual, views these groups. When you have finished please check that no comparisons have been missed. Then you can begin the second questionnaire. Any questions?

upper-class : politicians

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : refugees

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : unemployed

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : big business

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

unemployed : working-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

middle-class : working-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

refugees : women

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : unemployed

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

working-class : big business

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : politicians

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

working-class : trade unions

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

refugees : middle -
        class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

big business : trade
        unions

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

unemployed : upper-
        class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : women

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

middle-class : big
        business

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : politicians

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : refugees

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : trade
        unions

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : big
        business

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : working-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

big business : upper-
        class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

upper-class : aborigines   Same   different

0	1	2	3	4	5	6	7	8

migrants : big business   Same   different

0	1	2	3	4	5	6	7	8

trade unions : upper-class   Same   different

0	1	2	3	4	5	6	7	8

middle-class : unemployed   Same   different

0	1	2	3	4	5	6	7	8

big business : men   Same   different

0	1	2	3	4	5	6	7	8

women : upper-class   Same   different

0	1	2	3	4	5	6	7	8

trade unions : refugees   Same   different

0	1	2	3	4	5	6	7	8

women : middle-class   Same   different

0	1	2	3	4	5	6	7	8

politicians : aborigines   Same   different

0	1	2	3	4	5	6	7	8

trade unions : women   Same   different

0	1	2	3	4	5	6	7	8

aborigines : working-class   Same   different

0	1	2	3	4	5	6	7	8

women : migrants

Same   different

   0   1   2   3   4   5   6   7   8

migrants : working-class

Same   different

   0   1   2   3   4   5   6   7   8

big business : refugees

Same   different

   0   1   2   3   4   5   6   7   8

upper-class : migrants

Same   different

   0   1   2   3   4   5   6   7   8

aborigines : men

Same   different

   0   1   2   3   4   5   6   7   8

trade unions : unemployed

Same   different

   0   1   2   3   4   5   6   7   8

aborigines : middle-class

Same   different

   0   1   2   3   4   5   6   7   8

working class : refugees

Same   different

   0   1   2   3   4   5   6   7   8

refugees : upper-class

Same   different

   0   1   2   3   4   5   6   7   8

women : unemployed

Same   different

   0   1   2   3   4   5   6   7   8

migrants : middle-class

Same   different

   0   1   2   3   4   5   6   7   8

aborigines : refugees

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

big business : unemployed

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

working-class : politicians

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

refugees : unemployed

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : aborigines

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : unemployed

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : trade unions

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : upper-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : men

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : women

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

women : men

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : middle-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

working class : women

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

upper-class : middle class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : middle-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : migrants

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

working-class : upper-class

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : migrants

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : refugees

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

unemployed : aborigines

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

middle-class : men

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

women: big business

Same   different

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Appendix B2: MDS Questionnaire for Psychology III (Adult) Sample

During this exercise you will be judging how similar or
different a number of groups are from each other. You
will be comparing these groups two at a time along a
broken line marked with the words 'same' at one end and
'different' at the other. If you find no difference
between the two groups place a tick above the portion of
the broken line closest to the 'same' end. E.g.,

softball : baseball

Same   different

  0   1   2   3   4   5   6   7   8

If you find there is a difference, place a tick above the
broken line showing how much difference you find. Eg.,

softball : baseball

Same   different

  0   1   2   3   4   5   6   7   8

We would like you to remember that different people judge
things in different ways. This means that there are no
right or wrong answers. Two groups that are very
similar to one person may be quite different to another.
Both views are important. We are interested in finding
out how you as an individual compare these groups.

Before beginning this exercise could you please provide us with the
following information:

SEX: Male/ Female

DATE OF BIRTH:

FATHER'S OCCUPATION:

MOTHER'S OCCUPATION:

Please place a tick alongside the group(s) of which you regard yourself a
member.

women
men
politicians
aborigines
refugees
migrants
unemployed
trade unions
big business
working class
middle class
upper class
small business
welfare recipients
farmers
professionals/ executives
blue-collar workers
white-collar workers
multinational corporations
home-owners

same   different

aborigines : blue collar workers

0	1	2	3	4	5	6	7	8

women : men

0	1	2	3	4	5	6	7	8

middle class : women

0	1	2	3	4	5	6	7	8

refugees : blue-collar workers

0	1	2	3	4	5	6	7	8

professionals/executives : politicians

0	1	2	3	4	5	6	7	8

professionals/executives : aborigines

0	1	2	3	4	5	6	7	8

trade unions : unemployed

0	1	2	3	4	5	6	7	8

upper class : big business

0	1	2	3	4	5	6	7	8

big business : refugees

0	1	2	3	4	5	6	7	8

working class : welfare recipients

0	1	2	3	4	5	6	7	8

women : blue-collar workers

0	1	2	3	4	5	6	7	8

small business : welfare recipients

0	1	2	3	4	5	6	7	8

trade unions : refugees

0	1	2	3	4	5	6	7	8

	same								different

white-collar workers : farmers

0	1	2	3	4	5	6	7	8

middle class : migrants

0	1	2	3	4	5	6	7	8

aborigines : small business

0	1	2	3	4	5	6	7	8

men : professionals/executives

0	1	2	3	4	5	6	7	8

farmers : blue-collar workers

0	1	2	3	4	5	6	7	8

home-owners : welfare recipients

0	1	2	3	4	5	6	7	8

migrants : farmers

0	1	2	3	4	5	6	7	8

middle class : trade unions

0	1	2	3	4	5	6	7	8

multinational corporations : men

0	1	2	3	4	5	6	7	8

politicians : white-collar workers

0	1	2	3	4	5	6	7	8

farmers : refugees

0	1	2	3	4	5	6	7	8

professionals/executives : farmers

0	1	2	3	4	5	6	7	8

aborigines : white-collar workers

0	1	2	3	4	5	6	7	8

same   different

upper class : trade unions

— — — — — — — — —
0   1   2   3   4   5   6   7   8

women : big business

— — — — — — — — —
0   1   2   3   4   5   6   7   8

refugees : white-collar workers

— — — — — — — — —
0   1   2   3   4   5   6   7   8

politicians : trade unions

— — — — — — — — —
0   1   2   3   4   5   6   7   8

small business : farmers

— — — — — — — — —
0   1   2   3   4   5   6   7   8

farmers : unemployed

— — — — — — — — —
0   1   2   3   4   5   6   7   8

middle class : home-owners

— — — — — — — — —
0   1   2   3   4   5   6   7   8

politicians : working class

— — — — — — — — —
0   1   2   3   4   5   6   7   8

aborigines : farmers

— — — — — — — — —
0   1   2   3   4   5   6   7   8

working class : upper class

— — — — — — — — —
0   1   2   3   4   5   6   7   8

politicians : middle class

— — — — — — — — —
0   1   2   3   4   5   6   7   8

aborigines : middle class

— — — — — — — — —
0   1   2   3   4   5   6   7   8

small business : middle class

— — — — — — — — —
0   1   2   3   4   5   6   7   8

	same								different
unemployed : home-owners	0	1	2	3	4	5	6	7	8
multinational corporations : welfare recipients	0	1	2	3	4	5	6	7	8
working class : blue-collar workers	0	1	2	3	4	5	6	7	8
politicians : women	0	1	2	3	4	5	6	7	8
white-collar workers : unemployed	0	1	2	3	4	5	6	7	8
white-collar workers : multinational corporations	0	1	2	3	4	5	6	7	8
welfare recipients : refugees	0	1	2	3	4	5	6	7	8
welfare recipients : unemployed	0	1	2	3	4	5	6	7	8
professionals/executives : migrants	0	1	2	3	4	5	6	7	8
men : aborigines	0	1	2	3	4	5	6	7	8
middle class : white-collar workers	0	1	2	3	4	5	6	7	8
unemployed : small business	0	1	2	3	4	5	6	7	8
migrants : politicians	0	1	2	3	4	5	6	7	8

same   different

upper class : professionals/executives

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

refugees : middle class

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

big business : aborigines

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

home-owners : professionals/executives

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

professionals/executives : small business

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

working class : big business

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

white-collar workers : blue-collar workers

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

professionals/executives : welfare recipients

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

politicians : unemployed

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

middle class : working class

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

refugees : unemployed

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

home owners : small business

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

professionals/executives : blue-collar
                           workers

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

                                            same   different

aborigines : unemployed
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

blue-collar workers : politicians
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

trade unions : women
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

women : white-collar workers
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

white-collar workers : small business
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

small business : upper class
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

trade unions : small business
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

blue-collar workers : middle class
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

politicians : men
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

men : middle class
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

farmers : working class
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

multinational corporations : farmers
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

blue-collar workers : small business
                    ___   ___   ___   ___   ___   ___   ___   ___   ___
                     0   1   2   3   4   5   6   7   8

same   different

migrants : big business

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

women : professionals/executives

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

migrants : white-collar workers

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

home-owners : working class

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

migrants : home-owners

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

unemployed : professionals/executives

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

aborigines : working class

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

home-owners : blue-collar workers

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

aborigines : women

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

women : migrants

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

blue-collar workers : migrants

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

welfare recipients : migrants

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

unemployed : blue-collar workers

```
 ___  ___  ___  ___  ___  ___  ___  ___  ___
  0    1    2    3    4    5    6    7    8
```

same   different

refugees : professionals/executives

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

unemployed : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

farmers : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

multinational corporations : women

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

welfare recipients : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

women : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

blue-collar workers : upper class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : welfare recipients

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : refugees

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

big business : politicians

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : migrants

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

same   different

middle class : upper class

   0   1   2   3   4   5   6   7   8

aborigines : politicians

   0   1   2   3   4   5   6   7   8

small business : men

   0   1   2   3   4   5   6   7   8

home-owners : white-collar workers

   0   1   2   3   4   5   6   7   8

big business : trade unions

   0   1   2   3   4   5   6   7   8

refugees : politicians

   0   1   2   3   4   5   6   7   8

refugees : home-owners

   0   1   2   3   4   5   6   7   8

upper-class : refugees

   0   1   2   3   4   5   6   7   8

men : welfare recipients

   0   1   2   3   4   5   6   7   8

upper class : multinational corporations

   0   1   2   3   4   5   6   7   8

refugees : men

   0   1   2   3   4   5   6   7   8

farmers : trade unions

   0   1   2   3   4   5   6   7   8

upper class : white-collar workers

   0   1   2   3   4   5   6   7   8

	same								different

big business : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

upper class : politicians

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

white-collar workers : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

home-owners : multinational corporations

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : upper class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

refugees : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

small business : politicians

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

middle class : farmers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : small business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

welfare recipients : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

professionals/executives : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

women : upper class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

	same								different
welfare recipients : women	0	1	2	3	4	5	6	7	8
refugees : women	0	1	2	3	4	5	6	7	8
migrants : working class	0	1	2	3	4	5	6	7	8
white-collar workers : big business	0	1	2	3	4	5	6	7	8
farmers : welfare recipients	0	1	2	3	4	5	6	7	8
migrants : refugees	0	1	2	3	4	5	6	7	8
big business : multinational corporations	0	1	2	3	4	5	6	7	8
politicians : welfare recipients	0	1	2	3	4	5	6	7	8
aborigines : welfare recipients	0	1	2	3	4	5	6	7	8
big business : blue-collar workers	0	1	2	3	4	5	6	7	8
multinational corporations : politicians	0	1	2	3	4	5	6	7	8
small business : women	0	1	2	3	4	5	6	7	8
working class : men	0	1	2	3	4	5	6	7	8

	same								different

upper class : farmers

0	1	2	3	4	5	6	7	8

working class : small business

0	1	2	3	4	5	6	7	8

refugees : working class

0	1	2	3	4	5	6	7	8

men : trade unions

0	1	2	3	4	5	6	7	8

professionals/executives : big business

0	1	2	3	4	5	6	7	8

multinational corporations : trade unions

0	1	2	3	4	5	6	7	8

migrants : trade unions

0	1	2	3	4	5	6	7	8

men : white-collar workers

0	1	2	3	4	5	6	7	8

women : working class

0	1	2	3	4	5	6	7	8

big business : unemployed

0	1	2	3	4	5	6	7	8

men : farmers

0	1	2	3	4	5	6	7	8

multinational corporations : professionals/
executives

0	1	2	3	4	5	6	7	8

upper class : migrants

0	1	2	3	4	5	6	7	8

same   different

trade unions : home-owners

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

unemployed : men

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

multinational corporations : working class

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

blue-collar workers : welfare recipients

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

upper class : unemployed

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

professionals/executives : working class

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

farmers : politicians

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

men : blue-collar workers

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

multinational corporations : refugees

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

white-collar workers : trade unions

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

aborigines : trade unions

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

big business : farmers

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

upper class : men

—— —— —— —— —— —— —— —— ——
0   1   2   3   4   5   6   7   8

same   different

multinational corporations : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

upper class : welfare recipients

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

upper class : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

middle class : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

women : unemployed

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

multinational corporations : unemployed

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : unemployed

| 0 | 1 | 2 | 3 | 4 | 5 | · 6 | 7 | 8 |

home-owners : big business

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

small business : multinational corporations

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

multinational corporations : blue-collar
                                     workers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

men : migrants

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

migrants : multinational corporations

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : working class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

same   different

welfare recipients : white-collar workers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

blue-collar workers : trade unions

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

politicians : home-owners

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

unemployed : middle class

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

farmers : women

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

trade unions : professionals/executives

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

professionals/executives : white-collar
                                 workers

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

aborigines : multinational corporations

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Appendix B3

Year 9, School A: Averaged Dissimilarity Matrix (Means)

5.26
4.15 2.85
3.65 3.50 6.24
4.44 4.37 5.33 3.70
4.04 3.59 5.85 4.30 2.54
4.50 3.63 6.83 2.44 4.02 3.37
3.80 3.48 3.76 5.24 5.98 4.87 5.76
4.57 3.15 2.46 6.09 6.20 6.07 7.33 3.26
3.28 2.69 4.00 5.22 5.63 4.98 6.13 3.26 3.13
3.41 3.63 4.74 5.02 5.59 4.72 5.76 4.22 4.61 3.63
3.85 3.54 3.61 6.39 6.09 5.74 6.78 3.80 2.02 4.33 4.70

Year 9, School B Averaged Dissimilaruty Matrix (Means)

4.21
3.85 2.39
3.76 2.67 6.81
4.47 4.15 6.67 2.94
3.85 3.45 5.83 4.23 2.30
4.32 3.25 7.00 3.13 2.83 3.81
4.96 3.32 4.32 3.43 5.11 5.19 5.23
4.13 3.00 2.42 6.59 6.55 5.51 7.51 3.96
3.21 2.02 4.60 4.47 4.25 3.74 5.40 3.21 4.26
2.76 3.17 4.62 4.68 5.06 4.19 5.36 3.96 3.96 2.74
3.15 3.30 2.42 6.57 6.67 5.72 7.00 4.79 1.72 4.60 4.47

Year 12, School A: Averaged Dissimilarity Matrix (Means).

3.75
5.64 2.04
4.54 3.79 6.61
4.93 4.71 7.14 4.04
4.46 4.29 6.71 5.36 2.36
4.21 3.57 6.89 1.75 2.64 3.57
5.46 3.79 2.96 6.25 6.36 6.54 5.96
4.96 2.75 2.11 7.11 7.00 6.04 7.46 4.04
3.36 2.89 5.36 4.57 5.25 4.11 5.36 3.36 5.23
3.68 3.25 5.75 5.11 6.00 4.39 5.00 3.71 5.00 2.50
3.79 3.54 2.64 6.86 7.00 5.61 7.25 4.46 1.57 5.96 5.29

Year 12, School B: Averaged Dissimilarity Matrix (Means).

5.27
4.43 2.63
3.50 3.17 6.53
4.70 4.27 6.87 4.57
3.90 3.73 5.97 6.07 2.43
4.27 3.60 6.43 2.40 2.23 3.03
5.20 3.03 4.30 5.23 5.37 4.47 4.07
4.90 2.53 2.90 6.97 6.87 5.13 7.75 4.27
3.83 3.00 3.97 3.47 3.70 2.70 4.77 2.30 5.17
3.37 3.67 4.73 5.07 5.33 4.13 5.17 3.73 4.10 4.10
3.07 3.50 2.67 7.03 7.13 5.37 6.90 5.90 1.20 6.50 3.27

Psychology III: Averaged Dissimilarity Matrix (Means)

```
5.95
4.76 2.71
3.78 3.51 6.44
4.02 3.98 6.61 5.07
3.81 3.83 6.39 3.39 3.39
3.59 3.85 6.95 2.10 2.61 3.76
5.27 2.56 4.59 5.44 5.71 4.00 4.98
5.05 2.83 3.07 7.05 6.83 5.63 6.59 4.51
3.81 3.12 6.42 3.42 2.66 2.81 2.68 1.98 5.75
4.32 3.61 3.51 5.81 5.24 4.68 5.37 4.83 3.49 5.32
4.07 3.70 3.37 6.83 6.63 5.68 6.73 6.24 1.54 6.93 5.32
3.85 3.02 5.27 6.20 4.24 3.42 5.51 4.90 5.76 3.71 2.49 4.68
3.32 4.07 6.42 1.71 2.17 3.15 1.54 4.61 6.81 3.02 5.02 6.88 5.73
4.24 2.17 5.12 5.98 5.93 5.07 5.12 4.93 5.02 3.71 3.12 4.98 2.46 4.90
3.98 2.71 2.59 6.76 6.63 5.46 6.78 5.44 1.56 6.59 3.02 2.20 3.44 6.98 5.76
4.59 3.07 6.15 4.34 3.20 2.85 3.12 2.27 5.88 1.49 4.88 6.78 3.78 3.00 3.59 6.73
3.32 3.22 2.24 6.54 6.17 5.10 5.83 4.66 3.02 5.76 2.29 3.12 3.83 5.81 6.20 2.46 6.44
5.05 2.49 3.24 7.17 7.00 5.63 6.90 4.95 1.71 5.93 4.00 2.29 6.17 7.32 5.12 2.00 5.90 2.54
3.98 2.73 2.98 8.02 6.71 4.24 6.34 4.68 3.12 4.00 2.12 1.90 2.98 5.83 2.39 1.31 4.17 2.34 4.15
```

Appendix B4: Attribute Rating Questionnaire

Now we would like you to judge these social groups along
a number of different rating scales. On the top of each
page appears the name of the group which you will be
judging. The group name is underlined. Below the group
name are several rating scales. Each scale is labelled
with an adjective on the left hand side of the scale,
and the adjective's opposite on the right. We would
like you to indicate how you feel about each group in
respect to each adjective and its opposite by placing a
tick somewhere along each scale. Once again, remember,
that there are no right or wrong answers and that
different people will judge the groups differently. We
·are interested in how you as an individual judged the
groups. When you have finished, check each page making
sure each rating scale has been ticked and that none have
been missed.

aborigines

active	0	1	2	3	4	5	6	7	8	passive

wise	0	1	2	3	4	5	6	7	8	foolish

independent	0	1	2	3	4	5	6	7	8	dependent

rich	0	1	2	3	4	5	6	7	8	poor

powerful	0	1	2	3	4	5	6	7	8	weak

successful	0	1	2	3	4	5	6	7	8	unsuccessful

respect authority	0	1	2	3	4	5	6	7	8	do not respect authority

interesting	0	1	2	3	4	5	6	7	8	boring

work hard	0	1	2	3	4	5	6	7	8	lazy

strive to do well	0	1	2	3	4	5	6	7	8	do not strive to do well

sensitive	0	1	2	3	4	5	6	7	8	insensitive

competitive	0	1	2	3	4	5	6	7	8	co-operative

hard	0	1	2	3	4	5	6	7	8	soft

vote for Labor Party	0	1	2	3	4	5	6	7	8	Vote for Liberal Party

excitable	0	1	2	3	4	5	6	7	8	calm

friendly	0	1	2	3	4	5	6	7	8	unfriendly

educated	0	1	2	3	4	5	6	7	8	uneducated

This format was repeated for each stimulus group.

Appendix B5: <u>School A Year 9 Attribute Rating Scales, Means & Standard Deviations</u>

		Wom	Men	Pol	Ab	Ref	Mig	Un	Tu	BB	WC	MC	UC
Active	(Mean)	3.40	2.74	3.74	4.39	4.78	4.17	5.63	3.46	3.61	2.70	8.44	3.35
	(SD)	2.75	2.26	2.70	2.31	2.22	2.39	2.04	1.85	2.29	1.96	1.85	2.29
Wise		2.78	3.17	2.74	5.30	4.17	4.04	6.22	3.27	2.83	2.52	2.83	2.44
		2.30	1.85	2.90	2.29	2.42	2.21	1.86	2.23	2.25	1.56	1.90	2.02
Independent		3.04	3.35	3.82	4.09	4.96	2.52	4.48	3.09	2.61	2.74	3.65	2.48
		2.57	2.17	3.20	2.89	2.38	2.37	2.76	2.05	2.45	1.69	2.01	2.27
Rich		3.36	3.35	1.04	6.89	5.83	4.44	6.09	2.96	1.30	3.09	3.44	1.83
		1.47	1.30	1.85	1.70	2.61	2.31	1.83	1.68	1.64	1.47	1.62	1.90
Powerful		3.48	3.00	1.78	4.87	5.13	4.52	6.26	2.32	1.61	2.48	3.61	2.30
		2.02	1.76	2.37	2.24	2.26	2.13	1.94	1.86	1.90	1.62	1.62	1.96
Successful		3.26	2.74	1.22	5.61	5.04	4.22	5.91	2.32	1.59	2.52	2.87	1.48
		1.82	1.60	1.98	1.90	2.33	2.45	2.07	1.70	1.73	1.53	1.60	1.47
Respect authority		3.04	3.52	2.83	5.09	3.65	4.17	5.04	2.96	1.59	3.23	3.04	2.74
		2.14	1.93	3.11	2.07	2.46	2.33	1.94	2.13	1.59	1.95	1.94	2.24
Interesting		2.78	2.57	3.46	4.61	4.30	3.83	5.22	3.41	3.09	3.48	3.04	3.35
		2.30	1.70	2.80	2.73	2.38	2.48	1.70	2.28	2.47	1.70	1.94	2.04
Work hard		2.87	2.00	2.57	4.87	4.05	3.44	6.09	3.59	2.52	2.78	2.61	3.17
		2.38	1.54	3.13	2.82	2.13	2.50	2.04	2.36	2.79	2.11	1.97	2.66
Strive to do well		2.64	2.41	2.13	4.87	4.05	3.44	8.65	3.50	1.91	2.83	2.82	2.57
		1.62	1.94	2.75	2.44	2.46	2.39	1.92	2.22	1.56	2.04	2.06	2.57
Sensitive		2.78	2.91	3.26	4.65	3.70	3.57	4.54	3.96	4.00	2.78	2.82	2.91
		2.19	1.98	2.51	2.55	2.12	2.27	2.09	2.01	2.10	1.99	1.71	2.04
Competitive		3.61	3.57	2.13	4.48	4.83	4.22	4.65	2.18	1.52	2.78	3.04	3.09
		2.35	2.52	2.75	2.56	2.23	2.54	1.95	2.09	1.86	2.17	1.89	2.69
Hard		4.52	2.91	2.68	3.48	4.30	3.78	4.44	2.50	2.86	4.09	2.70	3.09
		2.29	2.07	2.68	2.39	2.12	2.09	2.35	2.06	1.88	1.86	1.96	2.15
Vote for Labor		3.82	3.33	3.14	3.96	4.18	3.82	4.55	3.40	3.14	3.41	3.46	3.50
		1.44	1.24	2.32	1.17	1.76	1.26	1.63	1.82	2.01	1.22	1.47	1.66
Excitable		2.96	3.00	3.70	4.17	3.70	4.04	5.05	3.14	3.35	3.44	3.48	3.78
		2.12	1.88	2.64	1.97	1.89	1.82	1.84	1.85	2.01	2.31	1.56	2.43
Friendly		2.09	3.00	2.87	4.78	3.74	3.61	4.17	3.64	3.35	3.00	3.22	3.13
		1.81	1.78	2.42	2.13	2.53	2.23	1.99	2.04	2.57	1.93	2.11	2.10
Educated		2.61	2.83	1.52	5.35	4.74	4.09	5.96	3.14	1.70	2.96	2.52	1.87
		1.64	1.72	2.13	2.17	2.70	2.58	1.96	2.27	2.29	1.92	1.68	1.96

School B Year 9 Attribute Rating Scales, Means & Standard Deviations

		Wom	Men	Pol	Ab	Ref	Mig	Un	Tu	Bb	WC	MC	UC
Active	(Mean)	2.58	2.27	3.08	4.89	4.58	4.35	5.46	2.31	1.05	2.65	2.86	3.39
	(SD)	1.79	1.73	2.38	2.23	2.55	2.06	2.23	2.09	2.11	2.08	1.34	2.37
Wise		3.00	3.50	3.31	5.08	5.39	4.46	6.04	4.19	2.00	3.04	2.85	2.92
		1.90	1.92	2.22	2.40	1.63	1.82	1.48	2.42	2.15	1.66	1.43	2.35
Independent		2.69	2.32	3.40	4.89	4.81	4.04	5.19	2.54	2.31	2.81	3.04	2.42
		2.17	1.99	2.58	2.64	2.73	2.38	2.47	1.92	2.56	2.25	1.87	2.60
Rich		3.46	3.58	2.15	6.85	6.50	5.19	6.56	3.80	1.39	3.96	3.65	1.44
		1.75	1.82	2.11	1.46	1.99	2.19	1.66	2.04	1.90	1.66	1.29	2.04
Powerful		4.12	2.54	1.89	6.08	6.19	5.62	6.36	2.92	1.15	4.62	3.73	1.46
		2.03	1.92	2.50	2.10	2.04	1.72	1.85	2.10	1.80	1.79	1.61	1.75
Successful		3.15	3.08	2.30	6.54	5.73	4.58	7.12	2.96	0.96	3.50	3.39	1.73
		1.64	1.81	2.46	1.45	2.18	2.12	1.42	1.79	1.71	1.90	1.68	2.20
Respect authority		2.96	3.69	3.53	6.39	4.23	3.81	6.08	4.81	2.73	2.89	3.08	3.69
		2.41	2.29	2.80	1.55	2.27	1.88	1.77	2.56	2.55	2.20	1.73	2.62
Interesting		2.08	3.23	5.00	4.58	4.50	3.42	5.46	5.12	3.70	3.04	2.73	4.31
		2.06	2.05	2.40	2.72	2.05	2.35	1.99	2.61	2.72	2.18	1.82	2.60
Work hard		2.58	2.12	4.08	5.65	3.73	3.65	6.46	4.11	1.50	1.96	2.31	3.04
		2.58	1.68	3.20	2.13	2.57	2.65	1.63	2.54	1.84	2.25	1.72	2.88
Strive to do well		2.39	1.92	2.85	5.81	3.77	3.46	5.88	3.76	1.08	2.27	1.89	2.15
		2.35	1.89	2.56	2.04	2.88	2.49	2.11	1.74	1.90	2.55	1.95	2.62
Sensitive		1.58	3.81	4.31	4.89	4.19	3.50	5.16	5.12	4.19	3.08	3.23	3.08
		2.12	2.28	2.11	2.22	2.56	1.77	2.15	2.19	2.59	2.38	1.73	2.62
Competitive		4.46	2.65	1.81	4.54	4.27	4.27	4.35	2.24	1.72	3.04	3.28	2.27
		2.16	2.26	2.18	2.44	2.38	2.15	2.30	2.09	2.48	2.55	2.25	2.31
Hard		5.19	2.31	2.77	3.96	3.65	3.85	4.27	2.56	1.89	2.80	3.15	2.73
		2.04	1.96	2.57	2.70	2.47	2.62	2.39	2.29	2.14	1.78	1.74	2.27
Vote for Labor		4.96	4.76	4.23	4.64	4.00	4.40	4.40	2.96	4.42	4.04	4.28	3.92
		1.70	2.26	2.00	1.73	1.92	1.85	1.80	2.42	2.60	2.63	2.59	2.06
Excitable		3.68	3.27	3.85	4.65	4.27	3.50	4.12	2.96	3.85	3.31	3.58	3.73
		2.56	1.80	2.46	2.33	2.19	2.16	2.22	2.43	2.56	2.09	1.98	2.26
Friendly		2.27	3.16	4.62	4.12	4.04	3.42	4.35	5.46	4.08	3.23	2.50	4.12
		2.38	1.84	1.33	2.47	2.03	2.23	1.92	2.21	2.34	2.36	2.08	2.12
Educated		2.54	3.00	2.00	6.77	5.42	3.81	5.08	4.19	1.89	3.12	2.46	1.62
		2.20	1.90	2.77	1.37	2.23	2.38	2.17	2.95	2.58	2.22	2.01	2.32

School A, Year 12 Attribute Rating Scales, Means & Standard Deviations

		Wom	Men	Pol	Ab	Ref	Mig	Un	Tu	Bb	WC	MC	UC
Active	(Mean)	3.14	1.93	2.14	5.00	4.71	4.57	5.07	2.50	1.86	2.71	2.64	3.64
	(SD)	1.88	1.70	1.41	1.96	1.73	2.03	1.77	1.35	1.41	2.16	1.65	1.91
Wise		2.57	3.86	2.86	4.93	4.64	4.43	4.64	3.86	1.86	3.07	2.93	3.57
		1.70	1.77	2.07	1.77	1.87	2.21	1.55	1.88	1.35	1.33	1.33	2.28
Independent		2.79	2.21	3.14	4.79	5.00	4.14	5.21	3.36	2.14	2.86	2.71	2.86
		2.01	1.31	2.71	2.16	2.18	1.96	2.05	2.27	2.48	1.66	1.33	2.35
Rich		3.71	3.50	1.50	5.79	6.00	4.43	6.29	3.64	1.29	4.36	4.00	1.00
		1.07	0.76	1.29	1.31	2.08	1.70	1.49	1.08	1.54	1.45	0.96	1.24
Powerful		3.64	2.71	1.93	4.29	5.79	5.00	5.71	1.64	1.29	3.86	4.00	2.43
		1.55	1.33	1.86	2.61	1.63	1.75	1.64	1.55	1.68	2.25	2.04	2.31
Successful		2.71	3.07	2.43	5.57	5.07	4.14	5.86	2.57	1.07	3.14	2.93	1.71
		1.57	1.44	2.50	1.22	2.20	1.61	1.56	1.22	1.44	1.51	1.33	1.38
Respect authority		2.93	4.00	2.93	5.93	4.29	4.07	4.57	4.86	3.36	2.43	2.79	3.79
		1.44	1.52	2.56	1.82	2.20	1.73	1.70	2.14	2.65	1.45	1.63	2.39
Interesting		2.57	2.50	3.79	3.64	4.71	4.00	4.07	4.36	4.43	2.43	2.43	5.07
		2.31	1.61	2.52	2.87	2.20	2.04	2.24	2.10	1.74	1.79	1.56	2.24
Work hard		2.50	2.43	3.29	4.64	4.07	3.21	4.71	3.79	2.36	1.64	2.07	4.07
		2.10	1.56	2.13	2.27	2.84	1.58	2.02	2.23	1.55	1.65	1.49	2.06
Strive to do well		1.86	2.50	1.93	5.43	3.86	2.71	4.50	2.79	1.36	1.79	1.79	2.86
		1.23	1.51	1.54	2.24	2.96	1.49	1.91	2.33	1.45	1.58	1.31	2.35
Sensitive		2.14	3.07	3.64	4.21	3.86	3.50	3.07	5.64	4.46	2.57	2.29	3.71
		2.03	1.82	2.31	1.76	2.18	1.83	2.43	2.24	1.78	1.60	1.59	1.68
Competitive		4.00	2.57	1.43	3.86	4.64	3.93	4.57	2.36	1.00	3.36	3.36	2.79
		2.08	1.45	1.34	2.28	2.13	1.98	2.03	2.10	1.36	2.02	2.59	2.72
Hard		5.43	2.86	2.14	2.79	3.86	3.93	3.79	2.29	2.21	2.86	3.50	3.36
		1.60	1.23	1.99	1.58	1.70	1.69	1.05	1.82	2.08	1.61	1.51	2.31
Vote for Labor		3.71	3.36	3.50	4.14	3.71	3.79	3.79	2.93	4.43	3.07	3.29	4.07
		2.37	1.55	1.29	0.86	0.83	1.05	2.23	1.39	2.24	1.73	1.68	2.20
Excitable		3.14	2.71	2.86	3.93	5.29	3.93	3.57	2.79	4.50	2.43	3.31	3.86
		2.21	1.73	2.11	1.82	1.98	1.39	2.50	2.08	2.07	1.60	1.93	1.70
Friendly		2.36	2.36	3.43	4.50	4.00	3.14	3.07	4.00	3.79	2.14	2.14	4.36
		2.02	1.91	2.03	2.77	2.39	1.96	1.77	2.32	1.63	1.61	1.56	1.78
Educated		3.36	2.50	1.93	5.57	5.43	3.71	5.21	3.14	1.21	3.36	2.57	1.86
		1.71	1.61	1.54	1.51	1.95	1.27	1.37	2.74	1.58	1.69	1.40	1.79

School B Year 12 Attribute Rating Scales, Means & Standard Deviations

		Wom	Men	Pol	Ab	Ref	Mig	Un	Tu	Bb	WC	MC	UC
Active	(Mean)	3.88	2.53	1.88	4.88	4.06	3.13	5.27	1.94	1.50	2.44	3.25	3.81
	(SD)	2.22	196	1.82	2.13	2.11	2.42	2.25	2.18	1.59	1.97	1.07	2.29
Wise		3.00	3.13	2.56	4.25	4.69	3.81	4.33	4.06	1.63	3.94	3.38	3.13
		1.75	1.46	2.37	2.18	1.70	2.34	1.54	1.57	1.41	1.69	1.31	2.19
Independent		3.63	2.73	3.75	4.25	4.94	3.81	4.20	2.93	1.75	3.63	3.13	2.88
		2.00	1.28	2.77	2.41	2.38	2.48	2.60	1.39	1.48	2.22	1.75	2.53
Rich		4.00	3.80	1.81	5.75	5.94	4.25	6.00	3.88	1.31	4.63	3.94	0.81
		1.27	1.15	1.42	1.34	2.02	1.57	2.04	1.36	1.20	1.89	0.77	1.05
Powerful		3.75	3.20	1.25	4.88	5.56	4.75	5.50	2.13	1.25	4.63	4.13	1.88
		1.92	1.15	1.34	2.13	1.90	2.02	1.91	2.22	1.13	2.00	1.26	1.09
Successful		3.69	3.53	2.50	5.19	5.25	3.50	5.87	3.13	1.44	3.94	3.44	1.31
		1.40	1.06	2.10	2.46	1.81	2.03	2.10	1.89	0.89	2.18	1.26	0.87
Respect authority		3.06	4.00	4.06	5.06	3.94	3.75	4.80	5.38	3.25	3.94	3.19	4.25
		1.34	1.69	2.57	2.11	2.59	2.27	1.86	2.53	1.69	1.77	1.42	2.82
Interesting		2.56	3.07	4.19	2.75	4.69	4.00	3.20	4.88	3.69	3.25	2.88	3.82
		1.86	1.62	3.04	2.62	2.18	2.10	1.37	2.28	2.12	1.61	1.41	2.29
Work hard		2.81	3.13	1.94	4.75	3.06	3.06	4.93	3.88	1.63	2.75	2.75	3.56
		1.72	1.30	1.77	2.89	2.11	2.35	1.98	2.39	1.31	2.11	1.53	2.10
Strive to do well		2.19	2.67	1.94	4.31	2.75	2.88	4.40	3.69	1.19	3.56	2.81	3.44
		1.56	1.35	1.57	2.41	2.02	2.28	1.88	2.18	0.91	2.13	1.60	2.25
Sensitive		1.13	4.27	4.56	3.25	3.31	3.56	3.87	5.75	4.44	3.38	3.13	4.38
		1.15	1.53	2.28	1.81	1.20	1.69	2.15	1.61	2.07	1.63	1.03	1.86
Competitive		3.69	2.27	1.63	4.19	3.31	3.13	4.35	2.50	1.00	3.50	3.56	1.94
		2.27	1.34	1.50	2.29	2.27	2.00	2.30	2.13	0.97	1.97	1.79	1.24
Hard		5.06	2.67	2.13	3.25	3.63	3.60	4.27	2.25	2.13	3.25	3.94	2.69
		1.91	1.40	1.50	1.95	1.89	1.68	2.39	1.69	1.46	1.44	1.18	2.02
Vote for Labor		4.33	3.71	4.13	2.93	3.33	3.07	4.40	2.38	4.73	2.75	4.47	5.13
		1.05	0.47	1.36	1.44	1.29	1.07	1.80	1.78	1.79	1.61	1.41	1.77
Excitable		2.56	2.93	2.13	2.69	3.00	2.87	4.12	2.94	3.38	3.56	3.50	3.38
		2.10	1.58	1.63	2.15	1.51	1.30	2.22	2.11	1.82	1.75	1.55	1.82
Friendly		1.94	3.40	3.69	3.19	3.13	3.20	4.35	4.56	4.13	2.81	2.31	3.19
		1.53	1.81	1.78	2.40	1.82	1.70	1.92	1.93	2.19	1.60	1.20	2.07
Educated		3.25	2.80	1.56	5.75	5.56	4.53	5.08	4.19	1.75	4.44	2.88	0.94
		1.73	1.15	1.32	2.08	1.86	1.73	2.17	2.17	1.00	2.13	0.72	1.06

Appendix B6

<u>Subject Weights for Year 9, School A</u>

Subject	Dimension 1	Dimension 2	Dimension 3
1	0.58	0.27	0.20
2	0.53	0.21	0.24
3	0.64	0.18	0.26
4	0.54	0.26	0.15
5	0.33	0.10	0.19
6	0.66	0.16	0.31
7	0.79	0.17	0.16
8	0.48	0.13	0.15
9	0.37	0.23	0.24
10	0.41	0.26	0.23
11	0.69	0.18	0.29
12	0.46	0.12	0.32
13	0.55	0.16	0.18
14	0.47	0.22	0.06
15	0.48	0.20	0.17
16	0.43	0.29	0.10
17	0.57	0.19	0.08
18	0.55	0.40	0.18
19	0.42	0.16	0.28
20	0.51	0.28	0.19
21	0.64	0.16	0.17
22	0.68	0.10	0.15
23	0.59	0.21	0.19
24	0.39	0.32	0.13
25	0.50	0.30	0.31
26	0.70	0.24	0.14
27	0.71	0.33	0.21
28	0.57	0.23	0.30
29	0.59	0.32	0.25
30	0.65	0.34	0.11
31	0.74	0.26	0.23
32	0.45	0.07	0.10
33	0.49	0.33	0.17
34	0.68	0.18	0.10
35	0.27	0.10	0.17
36	0.53	0.27	0.23
37	0.39	0.31	0.17
38	0.61	0.30	0.21
39	0.49	0.21	0.31
40	0.54	0.17	0.05
41	0.30	0.23	0.29
42	0.34	0.12	0.28
43	0.50	0.16	0.21
44	0.41	0.26	0.22
45	0.52	0.11	0.28
46	0.21	0.17	0.23

Subject Weights for Year 9, School B

Subject	Dimension 1	Dimension 2	Dimension 3
1	0.69	0.21	0.02
2	0.46	0.17	0.15
3	0.54	0.22	0.16
4	0.54	0.28	0.12
5	0.63	0.17	0.22
6	0.59	0.23	0.17
7	0.64	0.10	0.20
8	0.32	0.26	0.21
9	0.62	0.20	0.13
10	0.48	0.15	0.22
11	0.49	0.17	0.11
12	0.55	0.13	0.21
13	0.21	0.23	0.23
14	0.73	0.04	0.06
15	0.65	0.27	0.13
16	0.71	0.23	0.12
17	0.46	0.21	0.23
18	0.81	0.13	0.17
19	0.58	0.20	0.27
20	0.50	0.20	0.14
21	0.63	0.16	0.14
22	0.50	0.16	0.12
23	0.70	0.10	0.26
24	0.64	0.14	0.21
25	0.63	0.10	0.23
26	0.63	0.09	0.09
27	0.70	0.16	0.16
28	0.78	0.23	0.24
29	0.55	0.26	0.21
30	0.39	0.12	0.07
31	0.73	0.11	0.10
32	0.50	0.17	0.21
33	0.34	0.16	0.23
34	0.69	0.12	0.15
35	0.64	0.21	0.20
36	0.45	0.19	0.19
37	0.51	0.35	0.13
38	0.36	0.07	0.24
39	0.62	0.17	0.12
40	0.67	0.11	0.28
41	0.57	0.22	0.02
42	0.61	0.20	0.16
43	0.77	0.24	0.17
44	0.72	0.23	0.07
45	0.59	0.21	0.29
46	0.61	0.11	0.23
47	0.45	0.25	0.30
48	0.40	0.25	0.26
49	0.53	0.04	0.34
50	0.80	0.09	0.05
51	0.55	0.23	0.11
52	0.06	0.28	0.17
53	0.41	0.19	0.08

Subject Weights for Year 12, School A

Subject	Dimension 1	Dimension 2	Dimension 3
1	0.70	0.25	0.18
2	0.52	0.48	0.14
3	0.46	0.33	0.17
4	0.65	0.31	0.23
5	0.69	0.18	0.22
6	0.59	0.43	0.17
7	0.72	0.13	0.16
8	0.69	0.20	0.36
9	0.63	0.24	0.41
10	0.68	0.31	0.27
11	0.69	0.12	0.30
12	0.62	0.16	0.43
13	0.48	0.31	0.25
14	0.70	0.23	0.25
15	0.39	0.27	0.35
16	0.73	0.26	0.28
17	0.58	0.25	0.20
18	0.59	0.19	0.38
19	0.72	0.06	0.18
20	0.59	0.28	0.17
21	0.67	0.23	0.35
22	0.66	0.22	0.17
23	0.47	0.43	0.22
24	0.51	0.26	0.34
25	0.63	0.34	0.11
26	0.56	0.34	0.32
27	0.53	0.32	0.21
28	0.50	0.45	0.09

Subject Weights for Year 12, School B

Subject	Dimension 1	Dimension 2	Dimension 3
1	0.54	0.28	0.33
2	0.33	0.14	0.31
3	0.27	0.20	0.28
4	0.60	0.30	0.33
5	0.38	0.02	0.22
6	0.59	0.23	0.22
7	0.62	0.32	0.25
8	0.42	0.30	0.30
9	0.73	0.30	0.18
10	0.67	0.16	0.27
11	0.74	0.25	0.21
12	0.55	0.23	0.39
13	0.72	0.36	0.22
14	0.42	0.38	0.29
15	0.63	0.36	0.15
16	0.67	0.29	0.16
17	0.40	0.38	0.37
18	0.72	0.24	0.13
19	0.60	0.20	0.22
20	0.47	0.30	0.11
21	0.74	0.18	0.20
22	0.64	0.37	0.10
23	0.67	0.22	0.23
24	0.48	0.40	0.33
25	0.48	0.26	0.31
26	0.59	0.34	0.21
27	0.67	0.22	0.13
28	0.60	0.36	0.19
29	0.64	0.33	0.25
30	0.64	0.25	0.13

Subject Weights and Normalised Weights for Psychology III (Adult) Sample.
* Denotes Male Subjects.

	Subject Weights			Normalised Subject Weights	
Subject	Dimension 1	Dimension 2	Vector Length	Dimension 1	Dimension 2
1	0.70	0.25	0.7433	0.94	0.34
2	0.49	0.30	0.5745	0.85	0.52
3	0.65	0.30	0.7159	0.91	0.42
4.	0.70	0.23	0.7368	0.95	0.31
5	0.84	0.18	0.8591	0.98	0.21
6	0.68	0.29	0.7393	0.92	0.39
7	0.41	0.34	0.5326	0.77	0.64
8*	0.69	0.27	0.7409	0.93	0.36
9	0.65	0.35	0.7382	0.88	0.47
10	0.44	0.30	0.5325	0.83	0.56
11	0.61	0.21	0.6451	0.95	0.33
12	0.41	0.27	0.4909	0.84	0.55
13*	0.58	0.18	0.6073	0.96	0.30
14	0.58	0.32	0.6624	0.88	0.48
15*	0.76	0.15	0.7747	0.98	0.19
16	0.57	0.34	0.6637	0.86	0.51
17*	0.70	0.26	0.7467	0.94	0.35
18*	0.77	0.04	0.7710	0.99	0.05
19	0.81	0.17	0.8276	0.98	0.21
20	0.85	0.14	0.8615	0.99	0.16
21	0.78	0.20	0.8052	0.97	0.25
22	0.71	0.22	0.7433	0.96	0.30
23	0.61	0.15	0.6282	0.97	0.24
24*	0.55	0.35	0.6519	0.84	0.54
25*	0.77	0.17	0.7885	0.98	0.22
26	0.34	0.15	0.3716	0.91	0.40
27*	0.48	0.21	0.5239	0.92	0.40
28	0.61	0.16	0.6306	0.97	0.25
29*	0.61	0.30	0.6798	0.90	0.44
30	0.49	0.23	0.5413	0.91	0.42
31	0.70	0.22	0.7337	0.95	0.30
32	0.54	0.28	0.6083	0.89	0.46
33	0.57	0.41	0.7021	0.81	0.58

34	0.76	0.15	0.7747	0.98	0.19
35	0.38	0.30	0.4841	0.78	0.62
36*	0.48	0.15	0.5029	0.95	0.30
37	0.61	0.27	0.6671	0.91	0.40
38	0.63	0.15	0.6476	0.97	0.23
39	0.26	0.25	0.3607	0.72	0.69
40	0.70	0.29	0.7577	0.92	0.38
41*	0.71	0.14	0.7237	0.98	0.19

Appendix B7

Standard Deviations of 66 Comparisons Rank Ordered for Decreasing Variance for the Three Age Groups.

	Psych III	Rank	Year 12s	Rank	Year 9s	Rank
1.	2.23	1	3.15	2	3.27	3
2.	1.63	1	1.96	2	2.40	3
3.	2.09	2	1.62	1	2.37	3
4.	1.75	1	2.14	2	2.68	3
5.	1.58	1	2.24	2	2.59	3
6.	1.53	1	1.80	3	1.78	2
7.	1.26	1	1.99	2	2.37	3
8.	1.31	1	2.01	2	2.57	3
9.	1.41	1	1.63	2	2.43	3
10.	2.47	2	2.85	3	2.46	1
11.	1.68	1	1.97	2	2.52	3
12.	1.48	1	2.08	2	2.58	3
13.	1.41	1	1.78	2	2.15	3
14	2.31	1	2.67	2	2.77	3
15.	2.12	1	2.18	2	2.54	3
16.	1.47	1	2.00	2	2.44	3
17.	1.29	1	1.26	1	1.57	3
18.	1.72	2	1.70	1	1.82	3
19.	1.81	1	1.95	2	2.71	3
20.	1.52	1	1.92	2	2.65	3
21.	1.59	1	2.42	2	2.51	3
22.	1.52	2	1.50	1	2.24	3
23.	1.50	1	2.12	2	2.42	3
24.	2.07	1	2.52	3	2.36	2
25.	1.67	1	2.02	2	2.11	3
26.	1.71	1	2.13	2	2.19	3
27.	1.66	1	2.30	3	2.25	2
28.	2.24	2	2.16	1	2.25	3
29.	1.72	1	1.93	2	2.68	3
30.	1.70	2	1.63	1	2.37	3
31.	2.10	2	2.07	1	2.36	3
32.	1.26	2	1.15	1	2.12	3
33.	1.69	2	1.38	1	2.08	3
34.	1.37	1	2.12	3	2.08	2
35.	1.22	2	0.92	1	1.43	3
36.	2.09	1	2.29	3	2.11	2
37.	1.23	1	1.58	2	2.48	3
38.	1.29	1	1.95	2	2.10	3
39.	1.43	1	2.20	2	2.42	3
40.	1.94	1	2.19	2	2.45	3
41.	1.35	1	2.39	2	2.58	3
42.	1.35	1	2.08	2	2.32	3
43.	1.35	1	2.56	3	2.33	2

Standard Deviations Rank Ordered Continued.

	Psych III	Rank	Year 12s	Rank	Year 9s	Rank
44.	1.56	1	2.28	3	2.12	2
45.	1.78	1	2.01	2	2.32	3
46.	1.78	2	1.73	1	1.99	3
47.	1.50	1	1.84	2	2.33	3
48.	2.09	2	1.98	1	2.14	3
49.	1.19	1	1.80	2	2.20	3
50.	1.28	1	1.78	2	2.17	3
51.	1.42	1	1.97	2.5	1.97	2.5
52.	1.49	1	1.74	2	2.17	3
53.	1.70	1	1.82	2	2.10	3
54.	1.45	1	1.51	2	2.05	3
55.	2.21	1	2.49	3	2.22	2
56.	1.17	1	1.64	2	2.29	3
57.	1.32	1	1.99	2	2.35	3
58.	2.41	2	2.12	1	2.69	3
59.	1.18	1	1.48	2	2.07	3
60.	1.20	2	1.18	1	1.92	3
61.	1.42	1	1.98	2	2.17	3
62.	1.40	1	1.55	2	1.78	3
63.	1.58	1	2.08	2	2.33	3
64.	1.40	1	1.76	2	2.30	3
65.	1.47	1	2.04	2	2.67	3
66.	1.89	2	1.84	1	2.13	3

| Sum of Ranks | | 82 | | 126.5 | | 187.5 |

Appendix C

Appendix to Chapter 6

Attribution Questionnaire

Now we would like you to do something different. On each of the following 12 pages there is a description of a student sitting for year 12 exams. We would like you to read the description of each student carefully. Then you must indicate to what extent you agree or disagree with the statements about the student's chances of doing well in the exams or failing the exams. You must place a tick somewhere along the agree-disagree scales that appear for each student as well as the confidence scales that ask you how sure you are about your answers. There are 10 rating scales on each page. It is important that you do all of them. Now please turn over and begin the exercise.

Jane is in year 12 at school this year. Her father is a factory worker at the nearby car plant and her mother stays home to look after the family. They live in a 2 bedroom timber-framed house near the factory.

If Jane does well in the exams it is likely to be because

1. she is naturally bright and intelligent

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

2. she studied extremely hard

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

3. she was lucky

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

4. the exams were easy

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

5. how confident are you of your answers

Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely

If Jane fails the exams it is likely to be because

1. she is not naturally bright and intelligent

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

2. she did not study hard enough

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

3. she was unlucky

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

4. the exams were too difficult

Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disagree

5. how confident are you of your answers

Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely

Judy is an aboriginal girl sitting for year 12 exams this year. She comes from an aboriginal settlement in central Australia and has come to the city to finish her schooling.

If Judy does well in the exams it is likely to be because

1. she is naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she studied extremely hard

Agree   1   2   3   4   5   6   7   Disagree

3. she was lucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were easy

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

If Judy fails the exams it is likely to be because

1. she is not naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she did not study hard enough

Agree   1   2   3   4   5   6   7   Disagree

3. she was unlucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were too difficult

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

Georgia is in year 12 at school. Her mother is a member of parliament and is involved in many committees and community projects. Georgia often listens to her mother's speeches on the radio and television.

If Georgia does well in the exams it is likely to be because

1. she is naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she studied extremely hard

Agree   1   2   3   4   5   6   7   Disagree

3. she was lucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were easy

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

If Georgia fails the exams it is likely to be because

1. she is not naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she did not study hard enough

Agree   1   2   3   4   5   6   7   Disagree

3. she was unlucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were too difficult

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

Helen is in year 12 at school. She was born in Australia but her parents come from Italy. They migrated to Australia about 25 years ago. They have adjusted to life in Australia but now and again they yearn for their homeland.

<u>If Helen does well in the exams it is likely to be because</u>

1.   she is naturally bright and intelligent

Agree 1 2 3 4 5 6 7   **Disagree**

2.   she studied extremely hard

Agree 1 2 3 4 5 6 7   **Disagree**

3.   she was lucky

Agree 1 2 3 4 5 6 7   **Disagree**

4.   the exams were easy

Agree 1 2 3 4 5 6 7   **Disagree**

5.   how confident are you of your answers

Not at all 1 2 3 4 5 6 7   Completely

<u>If Helen fails the exams it is likely to be because</u>

1.   she is not naturally bright and intelligent

Agree 1 2 3 4 5 6 7   **Disagree**

2.   she did not study hard enough

Agree 1 2 3 4 5 6 7   **Disagree**

3.   she was unlucky

Agree 1 2 3 4 5 6 7   **Disagree**

4.   the exams were too difficult

Agree 1 2 3 4 5 6 7   **Disagree**

5.   how confident are you of your answers

Not at all 1 2 3 4 5 6 7   Completely

Sue's father is an important businessman. He owns several large department stores and supermarkets all around Australia. He attends many important business meetings and is always concerned about the economy. Sue's mother is also involved in the business. Sue is sitting for year 12 exams this year.

If Sue does well in the exams it is likely to be because

1. she is naturally bright and intelligent

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

2. she studied extremely hard

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

3. she was lucky

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

4. the exams were easy

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

5. how confident are you of your answers

    Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Completely**

If Sue fails the exams it is likely to be because

1. she is not naturally bright and intelligent

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

2. she did not study hard enough

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

3. she was unlucky

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

4. the exams were too difficult

    Agree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Disagree**

5. how confident are you of your answers

    Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Completely**

Tom is a 16 year old boy sitting for his year 12 exams. He lives with his parents and brother and sister in a modest house. If he doesn't do well enough to go on to further study, he will look for a job.

If Tom does well in the exams it is likely to be because

1.   he is naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2.   he studied extremely hard

Agree   1   2   3   4   5   6   7   Disagree

3.   he was lucky

Agree   1   2   3   4   5   6   7   Disagree

4.   the exams were easy

Agree   1   2   3   4   5   6   7   Disagree

5.   how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

If Tom fails the exams it is likely to be because

1.   he is not naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2.   he did not study hard enough

Agree   1   2   3   4   5   6   7   Disagree

3.   he was unlucky

Agree   1   2   3   4   5   6   7   Disagree

4.   the exams were too difficult

Agree   1   2   3   4   5   6   7   Disagree

5.   how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

Margaret is in year 12 at school. Margaret's father was sacked from his job and has been unemployed for nearly 2 years. Her mother does some part-time cleaning to help with the family finances. Her br-other has recently left school and is also finding it difficult to get a job.

If Margaret does well in the exams it is likely to be because

1. she is naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she studied extremely hard

Agree   1   2   3   4   5   6   7   Disagree

3. she was lucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were easy

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

If Margaret fails the exams it is likely to be because

1. she is not naturally bright and intelligent

Agree   1   2   3   4   5   6   7   Disagree

2. she did not study hard enough

Agree   1   2   3   4   5   6   7   Disagree

3. she was unlucky

Agree   1   2   3   4   5   6   7   Disagree

4. the exams were too difficult

Agree   1   2   3   4   5   6   7   Disagree

5. how confident are you of your answers

Not at all   1   2   3   4   5   6   7   Completely

Tan and her family are refugees. They fled from their homeland secretly and came to Australia to make a new life for themselves. They have been here for 10 years. They worry a lot about family members who remained back home. Tan is sitting for her year 12 exams this year.

If Tan does well in the exams it is likely to be because

1.   she is naturally bright and intelligent
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

2.   she studied extremely hard
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

3.   she was lucky
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

4.   the exams were easy
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

5.   how confident are you of your answers
     Not at all $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Completely**
                      1   2   3   4   5   6   7

If Tan fails the exams it is likely to be because

1.   she is not naturally bright and intelligent
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

2.   she did not study hard enough
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

3.   she was unlucky
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

4.   the exams were too difficult
     Agree $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Disagree**
                      1   2   3   4   5   6   7

5.   how confident are you of your answers
     Not at all $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ $\overline{\quad}$ **Completely**
                      1   2   3   4   5   6   7

Elisa comes from a wealthy family. Her grandparents are very well known in the community and are considered very important people. Elisa lives with her mother and father and brothers and sisters in the hugh house in the hills. It has a swimming pool, a tennis court and an enormous garden which extends into the forest. Elisa is in year 12 at school.

If <u>Elisa</u> <u>does</u> <u>well</u> in <u>the</u> <u>exams</u> <u>it</u> <u>is</u> <u>likely</u> <u>to</u> <u>be</u> <u>because</u>

1.   she is naturally bright and intelligent
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

2.   she studied extremely hard
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

3.   she was lucky
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

4.   the exams were easy
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

5.   how confident are you of your answers
      Not at all   __ __ __ __ __ __ __   Completely
                        1   2   3   4   5   6   7

If <u>Elisa</u> <u>fails</u> <u>the</u> <u>exams</u> <u>it</u> <u>is</u> <u>likely</u> <u>to</u> <u>be</u> <u>because</u>

1.   she is not naturally bright and intelligent
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

2.   she did not study hard enough
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

3.   she was unlucky
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

4.   the exams were too difficult
      Agree   __ __ __ __ __ __ __   **Disagree**
                   1   2   3   4   5   6   7

5.   how confident are you of your answers
      Not at all   __ __ __ __ __ __ __   Completely
                        1   2   3   4   5   6   7

Flo is in her last year at school and is sitting for exams. Her father is a tradesman and is involved with the union at work. He is the trade union representative for his work section. He attends many meetings with management aimed at improving work conditions and increasing the amount the workers get paid. Last year he was involved in organizing a strike which lasted for 2 weeks.

If Flo does well in the exams it is likely to be because

1. she is naturally bright and intelligent

   Agree   1   2   3   4   5   6   7   **Disagree**

2. she studied extremely hard

   Agree   1   2   3   4   5   6   7   **Disagree**

3. she was lucky

   Agree   1   2   3   4   5   6   7   **Disagree**

4. the exams were easy

   Agree   1   2   3   4   5   6   7   **Disagree**

5. how confident are you of your answers

   Not at all   1   2   3   4   5   6   7   **Completely**

If Flo fails the exams it is likely to be because

1. she is not naturally bright and intelligent

   Agree   1   2   3   4   5   6   7   **Disagree**

2. she did not study hard enough

   Agree   1   2   3   4   5   6   7   **Disagree**

3. she was unlucky

   Agree   1   2   3   4   5   6   7   **Disagree**

4. the exams were too difficult

   Agree   1   2   3   4   5   6   7   **Disagree**

5. how confident are you of your answers

   Not at all   1   2   3   4   5   6   7   **Completely**

Trudy is doing year 12 at school and is facing exams at the end of the year. Trudy's father is an accountant with the ANZ bank and her mother is a doctor's secretary. They live in a modern cream brick home with 3 bedrooms and a lovely garden.

If Trudy does well in the exams it is likely to be because

1. she is naturally bright and intelligent

   Agree 1 2 3 4 5 6 7 Disagree

2. she studied extremely hard

   Agree 1 2 3 4 5 6 7 Disagree

3. she was lucky

   Agree 1 2 3 4 5 6 7 Disagree

4. the exams were easy

   Agree 1 2 3 4 5 6 7 Disagree

5. how confident are you of your answers

   Not at all 1 2 3 4 5 6 7 Completely

If Trudy fails the exams it is likely to be because

1. she is not naturally bright and intelligent

   Agree 1 2 3 4 5 6 7 Disagree

2. she did not study hard enough

   Agree 1 2 3 4 5 6 7 Disagree

3. she was unlucky

   Agree 1 2 3 4 5 6 7 Disagree

4. the exams were too difficult

   Agree 1 2 3 4 5 6 7 Disagree

5. how confident are you of your answers

   Not at all 1 2 3 4 5 6 7 Completely

Hilda is a 16 year old girl sitting for her year 12 exams this year. She lives with her parents and brother and sister in a modest house. If she doesn't do well enough to go on to further study, she will look for a job.

If <u>Hilda</u> <u>does</u> <u>well</u> in <u>the</u> <u>exams</u> it is <u>likely</u> <u>to</u> <u>be</u> <u>because</u>

1.   she is naturally bright and intelligent
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

2.   she studied extremely hard
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

3.   she was lucky
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

4.   the exams were easy
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

5.   how confident are you of your answers
      Not at all $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Completely**
             1   2   3   4   5   6   7

If <u>Hilda</u> <u>fails</u> <u>the</u> <u>exams</u> <u>it</u> <u>is</u> <u>likely</u> <u>to</u> <u>be</u> <u>because</u>

1.   she is not naturally bright and intelligent
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

2.   she did not study hard enough
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

3.   she was unlucky
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

4.   the exams were too difficult
      Agree $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Disagree**
             1   2   3   4   5   6   7

5.   how confident are you of your answers
      Not at all $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$ **Completely**
             1   2   3   4   5   6   7

Year 9 Means and Standard Deviations on Ability, Effort, Task, Luck and Confidence Attributions for 12 Stimulus Groups.

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
					ABILITY							
Success												
M	3.60	3.71	3.80	4.47	4.02	4.24	3.71	4.42	3.71	4.16	3.51	3.91
SD	1.96	1.91	1.95	2.28	2.04	1.98	1.93	1.99	1.90	1.97	1.99	2.02
Failure												
M	4.73	4.00	4.49	4.02	4.29	4.56	3.89	3.96	4.16	3.67	4.73	4.58
SD	1.88	1.90	1.94	2.19	1.99	1.93	2.18	2.01	1.95	1.95	1.83	2.04
					EFFORT							
Success												
M	2.70	2.94	2.78	2.76	2.74	2.67	2.54	2.83	2.74	2.61	2.87	3.04
SD	1.71	1.95	1.83	2.14	2.06	1.86	1.75	1.94	1.77	1.90	1.77	1.78
Failure												
M	3.17	3.22	3.02	3.24	3.24	3.07	3.39	3.17	3.09	3.26	3.22	2.87
SD	2.12	2.14	1.90	2.07	2.35	2.05	2.29	2.06	2.03	2.06	1.98	2.16
					TASK							
Success												
M	5.13	5.09	5.09	4.34	4.89	4.47	4.62	4.57	5.23	4.70	5.09	4.94
SD	1.84	1.72	1.90	2.25	1.91	2.15	2.03	1.92	1.81	1.83	1.94	1.94
Failure												
M	4.26	4.43	4.23	4.21	4.75	4.26	4.30	4.34	4.77	4.02	4.30	4.77
SD	2.08	2.08	2.04	2.14	1.99	2.10	2.20	1.94	1.89	2.16	2.03	1.87
					TASK / FAILURE OUTCOME							
School A												
M	4.41	4.73	4.64	4.64	4.77	4.73	4.73	4.86	5.18	4.50	4.32	4.59
SD	2.15	2.23	2.04	2.19	2.25	2.27	2.07	1.96	1.94	2.26	1.89	2.20
School B												
M	4.12	4.16	3.88	3.84	4.72	3.84	3.92	3.88	4.40	3.60	4.28	4.92
SD	2.05	1.95	2.01	2.06	1.79	1.89	2.27	1.83	1.80	2.02	2.19	1.55

Table Continued

Luck

Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	4.59	4.82	4.61	4.73	4.52	4.34	4.41	4.32	4.52	4.66	4.66	4.09
SD	2.03	1.78	1.83	2.11	1.91	1.93	2.06	2.00	1.91	1.84	1.95	2.14

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	4.61	4.27	4.48	4.64	4.30	4.61	4.41	3.93	4.80	4.30	4.91	4.77
SD	1.96	1.82	1.87	2.04	1.98	2.00	2.14	2.06	1.65	1.86	1.80	2.11

Confidence

Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	4.98	5.44	5.02	5.39	5.07	4.90	5.27	5.10	5.20	5.20	4.98	5.17
SD	2.04	1.66	1.73	1.58	2.03	1.97	1.66	1.83	1.89	1.91	1.84	1.72

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	5.02	5.10	5.40	5.27	4.90	5.17	5.17	4.88	5.02	5.02	5.12	4.95
SD	1.82	1.86	1.62	1.82	1.90	1.83	1.86	2.00	1.98	2.04	1.74	1.96

Note: WO = Women; MEN = Men; PO = Politicians; AB = Aborigines; REF = Refugees; MIG = Migrants; UN = Unemployed; TU = Trade Unions; BUS = Big Business; WC = Working Class; MC = Middle Class; UC = Upper Class.

Year 12 Means and Standard Deviations on Ability, Effort, Task, Luck & Confidence Attributions for 12 Stimulus Groups.

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC

ABILITY
Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A M	4.00	4.07	3.57	3.36	3.29	3.43	3.57	3.43	3.14	3.57	3.21	3.93
SD	2.15	2.02	2.28	2.24	2.02	2.10	1.91	2.17	2.14	2.24	1.85	2.30
School B M	4.10	3.95	3.50	4.10	3.80	3.75	3.60	3.50	3.10	3.70	3.65	4.10
SD	1.41	1.43	1.76	1.48	1.47	1.41	1.70	1.64	1.25	1.78	1.35	1.71

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A M	4.50	4.36	4.29	4.64	4.86	4.29	4.29	4.71	5.00	5.14	5.00	4.79
SD	1.70	1.95	2.49	2.27	2.03	2.34	1.73	2.05	1.92	1.75	1.80	2.36
School B M	4.10	4.55	3.65	3.45	3.40	3.45	3.80	3.75	4.15	4.00	4.45	4.35
SD	1.71	1.43	1.69	1.79	1.79	1.43	1.67	1.80	1.50	1.59	1.50	1.76

EFFORT
Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	2.18	2.47	2.15	2.21	2.09	2.21	2.15	2.06	2.32	1.97	2.21	2.32
SD	1.14	1.46	1.13	1.53	1.29	1.30	1.54	1.32	1.27	1.36	1.27	1.61

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
M	2.94	2.65	2.35	2.12	2.82	2.38	2.56	2.44	2.29	2.85	2.29	2.21
SD	1.56	1.72	1.50	1.27	1.71	1.48	1.81	1.60	1.66	1.73	1.27	1.53

TASK
Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A M	6.43	5.86	6.29	5.71	6.21	6.00	5.43	6.07	6.00	6.21	5.64	5.64
SD	0.76	1.46	0.91	1.98	0.98	1.11	1.91	1.14	1.36	0.98	1.50	1.99
School B M	4.90	5.10	4.75	4.25	4.85	4.65	4.30	3.90	4.75	4.45	4.90	4.70
SD	1.41	1.33	1.65	1.77	1.57	1.53	1.81	1.89	1.52	1.73	1.59	1.78

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A M	5.64	5.50	5.21	4.93	5.50	5.71	5.14	5.71	5.71	5.14	5.71	5.86
SD	1.74	1.87	1.76	2.34	1.61	1.27	2.03	1.33	1.64	1.96	1.44	1.10
School B M	4.80	4.55	4.35	4.80	4.55	4.30	4.15	4.40	4.50	4.20	4.10	4.55
SD	1.36	1.61	1.57	1.47	1.85	1.75	1.69	1.60	1.70	1.32	1.80	1.96

Table Continued

LUCK
Success

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A												
M	5.43	4.57	5.71	4.57	5.43	5.14	4.86	5.50	5.21	5.36	5.57	5.00
SD	1.40	1.95	1.68	2.28	1.79	1.79	2.11	1.70	1.97	1.91	1.60	2.11
School B												
M	4.95	4.55	4.60	4.05	4.35	4.75	4.20	3.90	4.65	4.80	4.70	4.40
SD	1.67	1.70	1.90	1.82	1.60	1.65	1.80	1.77	1.63	1.58	1.49	1.85

Failure

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
School A												
M	5.14	4.86	5.07	4.71	5.43	4.86	4.86	5.36	5.50	4.79	5.79	5.50
SD	1.79	2.11	1.69	2.27	1.45	1.83	1.88	1.69	1.87	2.08	1.42	1.56
School B												
M	5.00	5.25	4.25	4.50	4.50	5.00	4.15	4.10	5.00	4.30	4.15	4.90
SD	1.65	1.29	1.77	1.54	1.93	1.34	1.93	1.45	1.38	1.59	1.63	1.55

CONFIDENCE

	WO	MEN	PO	AB	REF	MIG	UN	TU	BUS	WC	MC	UC
Success												
M	5.61	5.49	5.79	5.73	5.76	5.36	5.61	5.55	5.70	5.85	5.42	5.79
SD	1.12	1.30	1.39	1.40	1.37	1.39	1.22	1.28	1.05	1.18	1.46	1.05
Failure												
M	5.49	5.27	5.55	5.64	5.30	5.55	5.58	5.36	5.61	5.52	5.49	5.64
SD	1.18	1.44	1.33	1.19	1.65	1.27	1.15	1.39	1.17	1.18	1.40	1.27

Note: WO = Women; MEN = Men; PO = Politicians; AB = Aborigines; REF = Refugees; MIG = Migrants; UN = Unemployed; TU = Trade Unions; BUS = Big Business; WC = Working Class; MC = Middle Class; UC = Upper Class.

Overall MANOVA: Ingroup vs Outgroup Table of Means & Standard Deviations

		School A		School B	
		Age 1	Age 2	Age 1	Age 2
Ingroup Success					
Ability	[M]	3.98	3.62	3.66	3.74
	[SD]	1.70	1.87	1.15	1.01
Effort		2.98	2.00	2.55	2.32
		1.31	0.82	1.08	1.01
Luck		4.74	5.30	4.36	4.57
		1.35	1.55	1.16	1.28
Task		4.76	6.02	5.20	4.70
		1.77	1.01	1.10	1.12
Confidence		5.05	5.88	5.15	5.47
		1.85	0.88	1.36	1.05
Outgroup Success					
Ability		4.80	3.41	3.88	3.86
		1.65	1.72	1.24	1.13
Effort		3.13	1.80	2.35	2.30
		1.45	0.80	1.28	1.17
Luck:		4.44	5.00	4.65	4.34
		1.47	1.80	1.36	1.32
Task		3.88	5.84	5.03	4.49
		2.08	1.34	1.39	1.25
Confidence		5.28	5.86	5.14	5.43
		1.97	0.91	1.49	1.14
Ingroup Failure					
Ability		4.64	4.72	3.86	4.13
		1.33	1.66	1.22	1.06
Effort		3.15	2.35	2.89	2.58
		1.26	1.04	1.16	1.18
Luck		4.79	5.25	4.29	4.61
		1.27	1.54	1.16	1.09
Task		4.85	5.56	4.17	4.48
		1.60	1.31	1.38	1.12
Confidence		5.26	5.80	4.92	5.26
		1.74	0.80	1.45	1.19

Table Continued

Outgroup Failure

Ability	4.27	4.52	3.80	3.53
	1.72	1.81	1.51	1.30
Effort	3.16	2.45	3.18	2.53
	1.59	1.05	1.67	1.36
Luck	4.97	4.96	3.95	4.49
	1.46	1.68	1.46	1.45
Task	4.83	5.32	3.86	4.49
	1.73	1.67	1.63	1.19
Confidence	5.33	5.88	4.98	5.25
	1.93	0.78	1.50	1.29

Year 9 Ability Attributions

	DF	MS	F	P
Within Cells	43	26.72		
School	1	71.88	2.69	.108
Within Cells	43	10.04		
Outcome	1	27.64	2.75	.104
School x Outcome	1	.98	.10	.757
Within Cells	473	2.14		
Groups	11	3.04	1.42	.159
School x Groups	11	.71	.33	.978
Within Cells	473	3.11		
Outcome x Groups	11	7.64	2.46	.005
School x Outcome x Groups	11	3.78	1.21	.274

Year 9 Effort Attributions

	DF	MS	F	P
Within Cells	44	27.69		
School	1	17.56	.63	.430
Within Cells	44	7.19		
Outcome	1	40.45	5.63	.022
School x Outcome	1	4.10	.57	.454
Within Cells	484	2.20		
Groups	11	.43	.19	.998
School x Groups	11	2.63	1.20	.287
Within Cells	484	3.28		
Outcome x Groups	11	1.25	.38	.963
School x Outcome x Groups	11	4.80	1.46	.141

Year 9 Luck Attributions

	DF	MS	F	P
Within Cells	42	25.50		
School	1	21.81	.86	.360
Within Cells	42	4.19		
Outcome	1	.06	.01	.907
School x Outcome	1	4.72	1.12	.295
Within Cells	462	2.57		
Groups	11	2.49	.97	.472
School x Groups	11	3.26	1.27	.237
Within Cells	462	2.99		
Outcome x Groups	11	2.54	.85	.592
School x Outcome x Groups	11	5.72	1.91	.036

Table Continued

Year 9 Task Attributions

	DF	MS	F	P
Within Cells	45	35.58		
School	1	2.43	.07	.795
Within Cells	45	10.81		
Outcome	1	52.46	4.85	.033
School x Outcome	1	57.16	5.29	.026
Within Cells	495	2.22		
Groups	11	4.91	2.21	.013
School x Groups	11	3.45	1.55	.110
Within Cells	495	2.14		
Outcome x Groups	11	2.03	.95	.492
School x Outcome x Groups	11	3.87	1.81	.050

Year 9 Confidence Ratings

	DF	MS	F	P
Within Cells	39	53.84		
School	1	30.71	.57	.455
Within Cells	39	2.23		
Outcome	1	.31	.14	.710
School x Outcome	1	8.63	3.87	.056
Within Cells	429	1.54		
Groups	11	1.11	.72	.719
School x Groups	11	1.52	.99	.458
Within Cells	429	0.86		
Outcome x Groups	11	.83	.96	.478
School x Outcome x Groups	11	1.03	1.19	.293

Year 12 Ability Attributions

	DF	MS	F	P
Within Cells	32	36.65		
School	1	14.40	.39	.535
Within Cells	32	7.28		
Outcome	1	82.82	11.37	.002
School x Outcome	1	41.79	5.74	.023
Within Cells	352	1.56		
Groups	11	2.56	1.65	.084
School x Groups	11	.51	.33	.979
Within Cells	352	1.60		
Outcome x Groups	11	2.55	1.59	.099
School x Outcome x Groups	11	1.66	1.04	.413

Year 12 Effort Attributions

	DF	MS	F	P
Within Cells	32	21.54		
School	1	19.63	.91	.347
Within Cells	32	3.87		
Outcome	1	20.38	5.27	.028
School x Outcome	1	3.10	.80	.377
Within Cells	352	1.03		
Groups	11	1.01	.98	.462
School x Groups	11	.74	.72	.719
Within Cells	352	1.40		
Outcome x Groups	11	2.18	1.56	.109
School x Outcome x Groups	11	1.89	1.36	.193

Year 12 Luck Attributions

	DF	MS	F	P
Within Cells	32	41.31		
School	1	79.43	1.92	.175
Within Cells	32	2.16		
Outcome	1	.17	.08	.782
School x Outcome	1	.99	.46	.503
Within Cells	352	1.55		
Groups	11	2.93	1.89	.039
School x Groups	11	3.59	2.31	.009
Within Cells	352	1.07		
Outcome x Groups	11	1.88	1.75	.061
School x Outcome x Groups	11	.47	.44	.940

Table Continued

Year 12 Task Attributions

	DF	MS	F	P
Within Cells	32	28.54		
School	1	279.41	9.79	.004
Within Cells	32	3.42		
Outcome	1	21.77	6.37	.017
School x Outcome	1	4.12	1.21	.281
Within Cells	352	1.25		
Groups	11	2.19	1.75	.061
School x Groups	11	.99	.79	.645
Within Cells	352	1.52		
Outcome x Groups	11	1.03	.68	.758
School x Outcome x Groups	11	1.59	1.05	.404

Year 12 Confidence Ratings

	DF	MS	F	P
Within Cells	31	23.87		
School	1	46.18	1.93	.174
Within Cells	31	1.02		
Outcome	1	3.15	3.08	.089
School x Outcome	1	1.06	1.04	.316
Within Cells	341	0.82		
Groups	11	.84	1.02	.427
School x Groups	11	.84	1.02	.427
Within Cells	341	0.49		
Outcome x Groups	11	.41	.84	.601
School x Outcome x Groups	11	.70	1.43	.157

Appendix D

Appendix to Chapter 7

Appendix D1
Bicentenary Questionnaire

University of Adelaide

Department of Psychology

<u>Survey of Student Opinion</u>

We wish to obtain your opinion on Australia's Bicentenary Celebrations which occurred last year. We stress that all your responses will be treated as confidential. No-one will be able to link you with the opinions expressed. Before beginning the exercise please provide us with the following information.

Sex: 1. Male   2. Female

Age: _____ yrs _____ mths

Country of Birth: _____

Father's Country of Birth: _____ Father's Occupation: _____

Mother's Country of Birth: _____ Mother's Occupation: _____

<u>(Thankyou for your cooperation.)</u>

1. What do you think are the dominant <u>images</u> presented in this advert?

2. What <u>message</u> do you think the makers of this advert were trying to put across?

3. This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent the <u>advert</u> made you feel this way.

1 very slightly or not at all	2 a little	3 moderately	4 quite a bit	5 extremely

_____ interested   _____ irritable

_____ distressed   _____ alert

_____ excited   _____ ashamed

_____ upset   _____ inspired

_____ strong   _____ nervous

_____ guilty   _____ determined

_____ scared   _____ attentive

_____ hostile   _____ jittery

_____ enthusiastic   _____ active

_____ proud   _____ afraid

4. Do you think this was a good advert for Australia's Bicentenary   1.yes   2. no

If you answered <u>yes</u>, give your reasons

If you answered <u>no</u>, give your reasons

1.What, do you think, were the main objectives of the bicentenary celebrations?

2. What did the bicentenary mean to you?

3. What, in your opinion, were some of the positive features (if any) of celebrating the bicentenary?

4. What, in your opinion, were some of the negative features (if any) of celebrating the bicentenary?

To what extent do you think the following statements were <u>obvious</u> and <u>clear goals</u> of the bicentenary celebrations

1. To celebrate 200 years of European settlement.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

2. To unite the different groups of people in Australia.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

3. To instil national pride and patriotism in Australians.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

4. To make Australians aware of their European (white) history.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

5. To make Australians aware of their Aboriginal (black) history.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

6. To highlight and celebrate the achievements and progress which has made Australia 'the lucky country'.

very obvious   1   2   3   4   5   6   7   not a
& clear goal   goal

Please <u>evaluate</u> each of the following goals of Australia's bicentenary celebrations, that is, how good or bad <u>you</u> think these goals were.

1. To celebrate 200 years of European settlement.

extremely good	1	2	3	4	5	6	7	extremely bad

2. To unite the different groups of people in Australia.

extremely good	1	2	3	4	5	6	7	extremely bad

3. To instil national pride and patriotism in Australians.

extremely good	1	2	3	4	5	6	7	extremely bad

4. To make Australians aware of their European (white) history.

extremely good	1	2	3	4	5	6	7	extremely bad

5. To make Australians aware of their Aboriginal (black) history.

extremely good	1	2	3	4	5	6	7	extremely bad

6. To highlight and celebrate the achievements and progress which has made Australia 'the lucky country'.

extremely good	1	2	3	4	5	6	7	extremely bad

Now please evaluate how <u>successful</u> the Australian bicentenary celebrations were in achieving the following goals.

1. Celebrating 200 years of European settlement.

extremely   1   2   3   4   5   6   7   extremely
successful   unsuccessful

2. Uniting the different groups of people in Australia.

extremely   1   2   3   4   5   6   7   extremely
successful   unsuccessful

3. Instilling national pride and patriotism in Australians.

extremely   1   2   3   4   5   6   7   extremely
sucessful   unsuccessful

4. Making Australians aware of their European (white) history.

extremely   1   2   3   4   5   6   7   extremely
successful   unsuccessful

5. Making Australians aware of their Aboriginal (black) history.

extremely   1   2   3   4   5   6   7   extremely
successful   unsuccessful

6. Highlighting and celebrating the achievements and progress over the last 200 years which has made Australia 'the lucky country'.

extremely   1   2   3   4   5   6   7   extremely
successful   unsuccessful

1. Were you in favour and supportive of Australia's efforts to celebrate 200 years of white settlement?

1.yes   2. no   3.uncertain

Please give reasons why

2. Please list any bicentenary functions/celebrations you attended last year, e.g., the Tall Ships, Bicentennial Bonfire etc.

3. If there was an election held tomorrow which political party would you vote for?

1. Labor

2. Liberal

3. Democrats

4. Other - please specify

5. Uncertain

Thank you for completing the first part of the questionnaire. Now please turn over and begin the second section of the questionnaire.

Appendix D2

Category Responses to Open-ended Questions.

What do you think are the dominant images presented in this advert?

Subject No	Group No	Category 1: Party atmosphere, celebrations, happiness, fun. N = 30
1	1	celebration, happiness
2	1	nation must celebrate 200 years
3	1	bicentenary should be celebrated by all Australians
8	1	happiness
9	1	happy Australians, working to enjoy Australia
10	1	celebrate achievements and progress since white settlement
12	1	smiling people
13	1	everyone celebrating, even an Aborigine
14	1	many people in party atmosphere
15	2	Australia is happy country, bicentenary chance for celebration, all can take active part to celebrate
16	2	bicentenary time of celebration and happiness
17	2	people enjoying themselves together in name of Australia
18	2	happiness, lots of people celebrating 200th birthday
20	2	Australians are celebrators of a nation, Australians are nice, happy
23	2	happy Australians celebrating bicentenary
24	2	group of people singing about year long party
25	2	everyone is happy, laughing and singing
26	2	everyone happy with way Australia is at moment
28	2	happy, white Australians
30	3	atmosphere of culture, celebrations, joy and happiness
31	3	they're all singing and smiling
32	3	everyone celebrating - all sorts of people
33	3	happy people feeling enthusiastic about celebrating bicentenary
35	3	celebration of 200 years of European settlement
36	3	to think of Australia's origins and get involved in celebrations
38	3	everyone happy
39	3	celebration
40	3	everybody's happy and laughing, party atmosphere
42	3	celebrating Australia's birthday
43	3	happy people, celebrating atmosphere

Subject No	Group No	Category 2: Unity, togetherness, people coming together, friendship, mateship. N = 19
1	1	working together, comradeship, unity
4	1	unity
6	1	unity
7	1	mateship
15	2	unified country
16	2	society working together to make Australia great place
18	2	togetherness
20	2	Australians are friendly
21	2	uniting as one, everyone coming together to celebrate
22	2	togetherness and unity
23	2	friendship and unity between Australian people
24	2	colour and creed don't matter
25	2	Australia and its people bright and colourful and don't mind getting together, Australian mateship
29	3	fraternity
31	3	united, arms around each other
35	3	unity of Australians
39	3	co-operation
40	3	co-operation between Australians
41	3	everyone being special and important, closely knit group brought closer by bicentenary celebrations

Subject No	Group No	Category 3: Symbols representing Australia - Ayers Rock, Aust. outback/landscape, sunshine, akubra hats, Australian flag. N = 18
5	1	Ayers Rock, red dust
7	1	typical Australian landscape
12	1	Australian outback, Australian flag, bicentenary flag
13	1	world's largest rock, Australian outback
14	1	Ayers Rock (heart of Australia), Australian outback
17	2	typical Australia = Ayers Rock, akubras, suntans, Australian flags and logos
21	2	Ayers Rock, outback Australia and landscape
23	2	Ayers Rock as stereotype of Australian outback, outback Australia and landscape
24	2	Ayers Rock
27	2	sunshine
28	2	sunshine
31	3	outback of Australia, akubra hats which represent Australia
32	3	Ayers rock, flags of bicentenary and Australia
33	3	prominent Australian landscape, Ayers Rock
34	3	popular Australian places
36	3	landscape of outback Australia
37	3	Ayers Rock, Australian landscape
43	3	outback

Subject No	Group No	Category 4: Pride, patriotism, nationalism, common identity, the country 'Australia'. N = 18
3	1	200 years something to be proud of
4	1	proudness
8	1	being proud to live here, large country
9	1	working towards national identity, yet still individuals
10	1	Australians should be proud because it is marvellous country
17	2	national pride
19	2	bicentenary is to get everyone together as nation or whole country
20	2	Australians are patriotic, Australians are proud
22	2	how great 'Australia' is
23	2	mutual admiration of this country
26	2	felt sense of identity with country
29	3	nationalism, enthusiasm
30	3	200 years something to be proud of, Australia is really good country
32	3	Australianism
34	3	Australia
35	3	pride, patriotism
42	3	the country 'Australia'
43	3	proud people

Subject No	Group No	Category 5: Famous Australians, personalities, celebrities. N = 15
3	1	prominent members of society are involved therefore we should be
5	1	'famous people support bicentenary, you should too', presence of known people
11	1	'who's who of Australia - supposedly represents whole of Australia
14	1	well known Australians
17	2	famous Australians, role-models
20	2	Australians are T.V. stars, Australians are famous
22	2	majority of people recognisable actors on T.V.
26	2	many people who have made it in the world (money-wise) and that 'you' can do it too
31	3	groups of Australians (some well known celebrities)
32	3	Australian achievers
33	3	large collection of famous people
34	3	personality images
36	3	shows all groups uniting with personalities, many Australian personalities shown having fun, celebrating bicentenary
39	3	everyone together, famous rich people with average Australians
43	3	famous people singing

Subject No	Group No	Category 6: Diversity of society, people from various backgrounds. N=12
1	1	portrays wide section of community, e.g., handicapped, aged, children
2	1	people from different national backgrounds should celebrate
6	1	all ages and races (but predominantly white)
7	1	diversity of Australian people
8	1	diverse society
9	1	multicultural Australia
17	2	black and white races together
19	2	bicentenary is for everyone, no matter what race
25	2	all types together, racial and handicapped, men, women and children
31	3	appears to be random selection of Australians
32	3	togetherness - Aborigines and other nationalities included as part of the Australian way
37	3	large group of participants - mixed backgrounds

Subject No	Group No	Category 7: Omissions, exclusions, unrepresentativeness of people in advert of Australian society. N = 8
4	1	no Aborigines (maybe 1)
16	2	celebration predominantly about white Australians
20	2	didn't see any Aborigines
22	2	white Australia, what happened to person off the street?
26	2	let's not forget Aboriginals so they focus in on one to keep everyone happy, to show they haven't forgot about them
27	2	token Aboriginal and disabled person in wheelchair but mostly people were young, attractive, fit and carefree
28	2	no black Australians
39	3	no signs of multiculturism, only one Aborigine, image that Australians are white and only they should be celebrating

Subject No	Group No	Category 8: Miscellaneous. N = 12
5	1	Ocker Aussies
7	1	acceptance (disabled people shown)
8	1	success
10	1	Australians are terific
15	2	Australia is a successful country
19	2	Australia is a place of equal opportunity
22	2	clean cut image
23	2	warmth and caring
27	2	mostly people were young, attractive, happy and carefree. Youth and vitality
39	3	wants to celebrate 200 years of prosperity
41	3	equality of Australians
42	3	typical Australians

What message do you think the makers of this advert were trying to put across?

Subject No	Group No	Category 1: To celebrate 200 years of progress/achievements, great nation,pride in nation, N = 25
1	1	have earned right to celebrate 200 years of achievement, there really is something to celebrate
4	1	we have a great country, should be proud to celebrate 200 years
5	1	give ouselves a 'pat' on the back
7	1	trying to create a sense of achievement
10	1	patriotism towards Australia, be proud of being an Australian
11	1	that we are a great nation worth celebrating
12	1	that Australia has achieved a lot in 200 years
13	1	every Australian to be proud of their nation and to celebrate being 200 years old
14	1	try to instil a feeling of national pride with continuing message of 'nation'
16	2	Australians should be proud of the achievements of the past 200 years
18	2	Australia is a great place
20	2	Australians are proud and patriotic
24	2	to recognise our own achievements and the achievements of our fellow Australians, to be proud to be Australian
25	2	together with happiness and joyous pride in their country and each other
26	2	plenty to be proud in terms of its achievements and people who have given Australia some recognition, that we are a happy, prosperous nation
28	2	to be proud of Australia and its achievements, proud to be white Australians
29	3	encouraging national spirit
30	3	be proud of such a country, that Australia is a great country
31	3	we should be proud of our country and what it's done, how it's progressed etc., we have good reason to celebrate
33	3	enjoy 200 years of white colonisation of Australia
34	3	proud to be Australian
38	3	celebrating 200 years is a way of recognising what we have achieved, Australia is big, beautiful and has come a long way
39	3	celebrate things which have occurred in 200 years of white settlement in Australia
40	3	pat everyone else on the back for being so great
43	3	be proud to be Australian

Subject No	Group No	Category 2: All types of people to join in, people from all backgrounds, unification theme. N = 24
1	1	message of what Australia is like, i.e., unified
2	1	trying to tell non-Australian nationality type people to also join in celebration
3	1	for all Australians to be involved in bicentenary celebrations
4	1	should celebrate as whole nation
7	1	involve all people in celebrations, trying to create a spirit of mateship amongst Australians
8	1	we should be happy to live in a country as large and diverse as Australia
14	1	message is a unifying one, they want everyone to participate
19	2	togetherness of a country, everyone to join in and have fun, bicentenary is for everyone.
21	2	all should celebrate and come together - migrants, Australians, Aborigines
22	2	that we are a strongly bonded country (people embracing each other)
23	2	that people of Australia should all do their best during the bicentenary year
24	2	the plea is that we all pull together to help each other, that Australia should be a multiracial country which is non-discriminatory
25	2	that spirit of Australia can bond different people, from different walks of life
29	3	an image to help people bind together and celebrate the bicentenary
30	3	to make the bicentenary a 'hit' everyone should join in the celebrations
32	3	not only do the big people (e.g., Hawke, movie stars) make Australia, but mostly it is the little people who act behind the scenes who make it great. It takes all sorts of people to make Australia. To make celebrations great it takes all Australians - everyone. That everyone should celebrate bicentenary - Aborigines, disabled, young, old, immigrants.
33	3	bicentenary is something all Australians should be part of
34	3	'celebration of a nation', so everyone is included and therefore should give a hand
35	3	after 200 years of European settlement in Australia, it is time for Australians to unite, to come together and celebrate bicentenary
37	3	for all Australians to join together, no matter what background, to celebrate bicentenary
39	3	join together and celebrate
40	3	we should all get together
41	3	would not be complete without co-operation and involvement of everyone, we all have a special role in the 'celebration of a nation'
42	3	everyone in Australia should help in celebrating

Subject No	Group No	Category 3: Support for bicentenary celebrations, participation in bicentenary, festivities. N = 20
3	1	encourage a joyous and positive feeling about bicentenary
5	1	pushing positive side of bicentenary, bicentenary celebration is good time and a lot of fun
6	1	to smile, be nice and enjoy the celebrations
7	1	attempted to make viewers feel important by inviting them to 'give us a hand'
13	1	many people unaware of birthday so advert told people when celebration would occur
14	2	have a good time and if you don't, you're hurting the nation as a whole. That if we want to make bicentenary worthwhile and meaningful, should take part in activities it offers.
15	2	we can all take an active part, the bicentenary is a chance for a big, terrific celebration
17	2	all the celebrities will be having fun - you can have fun like them too, that bicentenary will be year of enjoyment. Famous people are urging to join them in celebrations
18	2	let's celebrate
20	2	Australians are celebrators of a nation
27	2	let's enjoy Australia
31	3	trying to make Australians realise that it was our bicentenary
33	3	emphasis placed on celebration as if the whole year will be filled with hundreds of exciting activities which everyone should participate in and enjoy
34	3	give every effort to make celebrations of 88 the best
36	3	attract people by showing personalities who viewers admire, celebrating together with people from the community. To attract the viewers into considering the origins of Australia and celebrate the occasion
37	3	not just as observers but to participate in the activities that occurred over `88
39	3	support for celebrations
41	3	we have all worked to make Australia what it is today and therefore we should all enjoy celebrations
42	3	just generally have a good time
43	3	in all enjoy the year, we should celebrate bicentenary

Subject No	Group No	Category 4: Improve Australia. N = 4
10	1	be determined to make country a better place
18	2	help ourselves to make it a better place
23	2	to make Australia a productive country
42	3	try to improve country - make it a better place

Subject No	Group No	Category 5: Australia Versus the Rest of the World. N = 3
13	1	Australian people show the world how good we really are
22	2	that we don't have the 'problems' that other countries have
31	3	show the rest of the world what we can do

Subject No	Group No	Category 6: National Identity. N = 2
9	1	work towards producing a joyous national identity
43	3	identity

Subject No	Group No	Category 7: Miscellaneous. N = 12
1	1	as a diverse, multicultural country we are actually heading the right way
1	1	linked with the land
11	1	look how many 'stars' we have produced who are still in Australia and have not left for greener pastures overseas
20	2	Australians are friendly
20	2	Australians are famous T.V. stars
20	2	Australians are nice and happy
22	2	anything is possible
27	2	life is good and will get better
27	2	Australia is a vibrant young country
38	3	advert is falsifying what has actually occurred over last 200 years by making it look like we have lived in harmony
43	3	maybe 'buy Australian' could be message to promote Australian goods
43	3	promote white Australia

Do you think this was a good advert for Australia's Bicentenary?
Yes responses

Subject No	Group No	Category 1: Party atmosphere, fun, good time, everyone to join in celebrations. N = 12
3	1	... getting together and having a good time. Encouraged everyone to join in the celebrations
4	1	makes you want to join in with the celebrations
13	1	it tells you need no excuse to have a good time in '88 as the rest of Australia should be celebrating and having good time as well
19	2	gets across the idea to join in its fun
20	2	created a spirit in which people will join in and attempt celebration
21	2	all Australians celebrate
26	2	tries to give everyone motivation to ... take a more active part in the celebrations
30	3	makes you want to sing along and join in all the fun
33	3	the scenes shown were pleasant ones filled with people having a good time
34	3	... to raise everbody's spirit of celebrations
36	3	... it will attract people into celebrating because of the party atmosphere portrayed by celebrities
37	3	everyone in it was happy and appeared to enjoy being part of it

Subject No	Group No	Category 2: Good song, catchy tune. N = 11
8	1	catchy tune
13	1	the actual song I liked which makes you want to see the advertisement again
14	1	catchy chorus 'celebration of a nation' is something which people will focus on, singing it to themselves imprinting it on their brain
16	2	catchy song - song drew out emotions like proudness, togetherness
18	2	geat song! fools a lot of people
25	2	music is bouncy and fairly easy to pick up, making it easy to remember
30	3	the song was full of life and makes you want to sing along and join in all the fun
32	3	the jingle was catchy and the words to it were very appropriate and make you think
33	3	the song was a good one, a catchy tune but not irritating
37	3	had catchy tune which repeated in your mind continuously
42	3	it was lively and had good (modern) music

Subject No	Group No	Category 3: Promoted pride, nationalism. N = 8
4	1	makes you proud
8	1	the advert had the familiarity that most Australians could relate to and consequently be proud to be Australian
20	2	to inspire patriotism, to feel proud to be Australian
26	2	tried to give everyone motivation to ... feel proud of Australia even though it may not be perfect (is any country?)
29	3	promoted the national spirit
34	3	... aiming at the pride of the Australian nation ... their sense of pride in a nation that's grown to this in 200 years
41	3	... celebrating a country they are proud to be part of
17	2	it triggered a fair bit of national pride - anticipation

Subject No	Group No	Category 4: Famous people/celebrities. N = 7
3	1	it showed some famous and not so famous members of Australia, getting together and having a good time
8	1	people in advert were dow to earth, even though some were TV personalities
25	2	the faces are relatively familiar; i.e., television celebrities and singers
30	3	all the TV personalities etc. was a great idea
31	3	it shows some of Australia's most talented people
33	3	the people used were famous Australians
36	3	party atmosphere portrayed by the personalities

Subject No	Group No	Category 5: Inclusion of variety of people. N = 6
3	1	it included peole from varied ethnic and social backgrounds
19	2	gets across idea ... that it is for everyone by having various different races and also having them altogether
25	2	it included faces like the ones you see at the supermarket or in the parks
32	3	because it was expressing togetherness, Australia as a whole, people from all different walks of life
41	3	we were shown people of totally different backgrounds, occupations, ages celebrating
42	3	it shows wide variety of Australians (in race also)

Subject No	Group No	Category 6: Ayers Rock as background. N = 4
3	1	used Ayers Rock as background
8	1	background was typically Australian
30	3	the advert really set the scene for the Bicentenary by having Ayers Rock in background
42	3	it shows some of our landmarks

Subject No	Group No	Category 7: Focused on positive/avoided negative. N = 3
12	1	advert conveys good positive points about Australia, rather than bad points which will not create any interest or will make people feel ashamed
14	1	it avoided negative images of Bicentenary and didn't say which were the bad points of the Bicentenary
34	3	alluding to forget the bad past, remember only the good things that have happened

Subject No	Group No	Category 8: Information. N = 3
13	1	it let everybody know when Australia is 200 years
24	2	it made people aware of a historical event of significance for history's sake; otherwise the dates and year may have passed unnoticed or uncommented. It also publicised many events such as Tall Ships, etc.
31	3	try to make the rest of Australia aware of what 1988 signified to Australia

Subject No	Group No	Category 9: Colourful and lively, attention grabbing. N = 3
21	2	it aroused attention
29	3	at least it was attention grabbing ... easy to understand, full of colour
32	3	it was lively, colourful and expressed Australia

Do you think this was a good advert for Australia's Bicentenary?
No responses

Subject No	Group No	Category 1: Limited range of people in advert. N = 11
4	1	there weren't any (maybe 1) Aborigines in the advert. I think there should have been
6	1	I saw only one Aborigine
10	1	this commercial only shows discrimination towards Aborigines. Throughout the advert there was only one Aboriginal. There were also no ethnics in the advert or Asians etc. They are also Australian if they live here and if they also work hard for this nation
11	1	it was not representtive of the population as a whole, as they used the people who have 'made it'. Also there was not a great amount of minority groups represented
22	2	because there was little race or ethnic representation and these groups make up a majority of our population
23	2	I think that they should have used more of the Australian communities to give a true picture of the Australian people
28	2	it also ignored all different nationalities that make up Australians
36	3	... it failed to reach a wide cross-section of Australian society. I felt that it was aimed at the Anglo-Saxon 'ocker'
38	3	it quite deliberately shows white Australians, maybe because they're guilty of our past encounters with Aborigines
39	3	no reference to Aboriginals
40	3	I didn't notice too many blacks in the advert, especially as it was filmed at Ayers Rock. How can the advert suggest cooperation between all Austrlians, if only whites are in it?

Subject No	Group No	Category 2: Avoids problems in Australia - deceptiveness of advert. N = 9
1	1	wish we had used the Bicentenary to focus attention on issues that need addressing rather than glossing them over .. sums up the whole year, which seemed to centre on lavish parties centralised in Sydney and Canberra with little attention to real issues
6	1	I cannot stand this type of group, pseudo-spontaneous advertising. It seemed a very slick piece of PR work, and was probably very expensive. Unfortunately, it seemed very false and superficial to me
7	1	in some ways it was particularly un-Australian as it showed a strong sense of community which the majority of Anglo-Saxon Australians do not experience
9	1	it presents an unreal image of Australians. We aren't that healthy, happy or motivated. Most Australians don't have a basis or relationship to the Australian outback
27	2	it was too light-hearted, unreal. Life is not one big party. Australia has some real issues to face: racism, poverty, drugs and homelessness, and should not pretend everything is going well
38	3	I don't think Australia has a lot to be proud of (except our technological advancements in the last 50 years). It quite deliberately shows white Australians, maybe because they're guilty of our past encounter with Aborigines and realise it would be a blatant lie to show us living together without problems
39	3	don't like the song as it gives a false impression to younger viewers (10 yrs or less). Very biased giving no mention of what bicentenary is for
40	3	how can the advert suggest cooperation between all Australians, if only whites are in it?
45	3	personally, I thought it was sensationalised, too nice to be good - too emotive (or to take seriously). The message was bland - what was it promoting, anyway - pride?

Subject No	Group No	Category 3: Aboriginal objections. N = 5
2	1	there is a dispute between Australians and Aborigines where I believe Aborigines should be more celebrated than Australians since Aborigines were the first type of man to set foot on this country
6	1	it is typical of the Bincentenary. It really does celebrate the European history
10	1	this commercial only shows discrimination towards Ablriginals. The white Australians show no respect towards the first inhabitants of this nation
15	2	it is treating the Bicentenary as an occasion for celebration that I don't think it should have been
35	3	it failed to mention the 200 years of 'white' supremacy

Subject No	Group No	Category 4: Not informative. N = 2
17	2	it wasn't very informative
28	2	the advert pointed out that we are strong and proud, but it didn't show why we should feel proud or strong. It didn't show what white Australia achieved in 200 years

Subject No	Group No	Category 5: Jingle annoying. N = 2
5	1	the actual music and lyrics were also not particularly exciting
38	3	the jingle I found to be most annoying

Subject No	Group No	Category 6: Miscellaneous. N = 3
7	1	it was sentimental
23	2	it doesn't show enough of Australia as a whole, only Ayrs rock
40	3	I don't think we needed such a long advert either, considering the size of the deficit. The money could have been much better spent

Attitudes Towards the Bicentenary:

1. What, do you think, were the main objectives of the bicentenary celebrations?

Subject No	Group No	Category 1: 200 years of white history, awareness of past history. N = 19
3	1	to recognise Australia's colonisation and its 200 years.
4	1	to celebrate 200 years. It is something to be proud of.
6	1	90% to celebrate white history and achievements.
7	1	they wanted to obtain some link with the past.
12	1	creation of tradition and interest in Australia's history.
14	1	on the surface, a birthday party for Australia's 200th year of white settlement.
17	2	to celebrate the second century of white settlement in Australia.
18	2	to celebrate 200th birthday of Australia.
20	2	to celebrate 200 years of white rule in Australia.
21	2	to recognise the settlement of Australia.
22	2	could have been to make us aware of how far we have come and developed as a nation in 200 years compared to other countries that have been around (populated) longer than us.
23	2	to make people aware that we are 200 years old. To make people realise the progress people have made in the first 200 years.
28	2	to celebrate 200 years of European domination (mostly British).
30	3	to celebrate the 200 years that white man has been in Australia.
33	3	to celebrate 200 years of colonisation. 200 years is such a milestone, the people should remember everything that has happened in the development of the country and find cause to celebrate.
37	3	to make us aware of our past.
41	3	to make sure everyone knew about the history of Australia - our heritage.
42	3	celebrating 200 years of Australalin history.
43	3	to celebrate 200 years of white settlement in Australia.

Subject No	Group No	Category 2: Patriotism, pride, nationalism. N = 18.
3	1	to promote patriotism.
8	1	encourage people to be proud of their country. making people realise how lucky we are to live here and that we shouldn't take it all for granted. To become involved and contribute to its development, i.e., in small business.
9	1	an attempt at instilling a national identity.
13	1	all Australians to be proud of their nation.
14	1	to reinforce in people the idea that we should be proud of our net achievements in the last 200 years. But deeper I think there could have been thoughts of nationalism, a nation working together for a common cause something normally restricted to times of war.
15	2	give Australian people a sense of national pride and a determination to succeed/help, etc., for the good of Australia.
16	2	make Australians feel proud, increase Australian morale.
18	2	to make Australia a better place.
26	2	a sense of national identity may bring the people together.
27	2	the verbal message was to be proud of Australia and our achievements as a nation.
29	3	to create patriotism
31	3	to realise what a great country this is.
34	3	to be proud of what we have made Australia to be what it is now. To look with pride and happiness at the progress made in the last 200 years.
35	3	to promote pride and patriotism in Australia.
36	3	to make people aware of how good their country is.
37	3	to make us proud of our country.
41	3	show how proud we should be of our past.
42	3	to show we should be proud of our country and to improve it.

Subject No	Group No	Category 3: To unite Australians. N = 13
3	1	to attempt to unite all Australians.
5	1	probably to inspire more 'nation-wide consciousness in what is a disjointed nation. People tend to think of themselves more as from different states than from Australia.
7	1	celebrations aimed to create feeling of achievement and unity amongst Australians.
13	1	to get all Australians to celebrate for the nation.
19	2	promote a fair go for all and togetherness of the country.
21	2	to bring the country together and not have it divided by whites versus blacks.
24	2	an attempt to use a historical event to draw together a nation of people who are 'drifting apart' by increasing patriotism.
25	2	to get people closer together.
26	2	to try and develop national unity and cohesion. they tried to show that the multicultural society could work and be profitable to all.
29	3	to help bring people together.
36	3	to unite the country in celebration.
37	3	to join different communities within Australia closer together.
40	3	to show that we get along well together.

Subject No	Group No	Category 4: Australia's image vis a vis the rest of the world. N = 8.
11	1	to say to the world "look at us, we are a great nation like America and England, and we want to be noticed".
14	1	to publicise Australia positively in the eyes of the world.
17	2	to promote Australia and Australians to the world.
20	2	to bring to the attention of the world onto Australia as a country in its own right.
25	2	to show off to the rest of the world.
31	3	to make all Australians and also the rest of the world realise how far we've come and what we can do.
33	3	to show the world how Australia has progressed.
40	3	to give a good impression overseas - show them we can have a good time.

Subject No	Group No	Category 5: Aboriginal objections. N = 4
2	1	Aborigines discarded as if foreigners in their own country. They did not have a say.
6	1	10% to highlight black history.
10	1	Aboriginals should have been involved in some celebrations. Australia is not 200 years old. The Aboriginals have been in this country for a longer period.
38	3	to celebrate 200 years of our country's settlement, and the so-called achievements we have made, i.e., destroyed a civilization (Tasmanian Aborigines) and approximately 6000 species of animals and insects and cut down more than two thirds of our natural forests.

Subject No	Group No	Category 6: To forget problems. N = 3
19	2	to forget the troubles the country was having.
27	2	a bit like the movies in World War II, give the people a party and maybe they will forget the real problems.
28	2	to take our mind away from problems facing Australia.

Subject No	Group No	Category 7: Miscellaneous. N = 13
1	1	good excuse for politicians to further own cause and build large monoliths in their own memory, e.g., Darling Harbour, Sydney.
8	1	to discover our own country, i.e., as in travel rather than travel to other countries.
9	1	producing a spectacle.
9	1	possibly to instill work ethic.
17	2	to have a year long, nation wide celebration.
20	2	why do we celebrate anything? Purely hedonistic.
25	2	to waste tax payers' money.
25	2	get a bit of publicity going.
29	3	to spend money.
32	3	federation should have been from when Australia actually became its own continent.
32	3	there was too much money spent on all the different celebrations. They overdid this part of it.
37	3	a great excuse for a lot of parties.
39	3	uncertain and don't care.

Question 2: What did the bicentenary mean to you?

Subject No.	Group No.	Category 1: Nothing/very little. N = 16
5	1	very little, because it did not touch me personally. Yes, it is nice that we've managed to be here for 200 years, but really - so what?
6	1	to quote the comedy act Austentayshus, '...the bicentenary is such a wank'
7	1	nothing; I ignored it
11	1	nothing much, just another year
14	1	not a great deal
17	2	not a great deal
18	2	not much at all. 200th birthday; big deal!!!
19	2	the bicentenary really did not mean a real lot as I have little involvement in the bicentennary other than living in Australia where it was happening
20	2	nothing really! Perhaps that's tragic?!
23	2	nothing
25	2	not a great deal. The year my father spent recovering from brain surgery. A few free demonstration shows and fireworks
29	3	the bicentenary meant very little to me
33	3	nothing really, although 200 years is a long time, it seems a minute period of time to be celebrating when Paris and France are celebrating 200 years of the French Revolution
37	3	not a lot as I participated in very little of what occurred
38	3	nothing
43	3	nothing. I was doing PES Year 12 in 1988 - the year just flashed by. I hardly noticed it except for TV and newspaper

Subject No.	Group No.	Category 2: Neutral and positive statements. N = 11
8	1	that Australia is only a very young country in comparison to others
9	1	uncertainty of the Australian people about direction. Immaturity of the Australian political system
12	1	slightly raised my interest in the celebration of Australia
21	2	the bringing together of a nation - peace, prosperity, recognition of the past
24	2	not very much other than the historical background of 'Australia's birth'
30	3	the bicentenary meant a step forward. Now we can try to improve the way of life, etc. and to try to make this country a better place to live
31	3	it meant a lot to me because it annoys me how sometimes Australia is considered inferior and unimportant compared to other larger countries when we really have just as much to be proud of as they do
32	3	it meant that Australia was a young and developing country compared to all the other great countries of the world. It made me aware of how much Australia has done for itself in just a short period of 200 years and that it is still developing today. It also made me feel lucky and proud to live in Australia
34	3	proud to be an Australian, to share in the celebrations
41	3	a milestone; a chance to look back on the achievements of Australia, its growth, the hard times, but also to look forward and hope for an even better 200 year
42	3	celebrating 200 years of Australia's history

Subject No.	Group No.	Category 3: Mixed emotions (positive and negative) N = 6.
1	1	mixed emotions. Pride in this country but the feeling that it may be misplaced. Irritation that issues which are causing disunity were not addressed; e.g., racism, poverty
3	1	not a great lot. I didn't get involved with it much. It made me recognise just how badly the Aboriginals had been treated since white colonialism. I felt more patriotic and somehow more Australian
13	1	it meant quite a bit only on Australia Day - after that life carried on the usual way. It also meant that there was going to be many festivals throughout the year - that I suppose was something to look forward to, but even when I did go to one of the festivals I did not think of the Bicentenary. I also felt a bit guilty about the Aboriginals being here thousands of years before
22	2	the Bicentennial year was an awakening to me, through various sources, of how Aboriginal people were and are treated in our society. I was aware though of Australia's progression and some credit must be given for this
26	2	not all that much. I've never been out of the country to realise how lucky (or unlucky) I am and so don't feel a very strong sense of nationalism. However, I am proud of Australia
36	3	the Bicentenary meant a moderate amount of celebration for me. It was more a case of going to see some of the celebration because it isn't something you see every day, rather than going to celebrate the Bicentenary

Subject No.	Group No.	Category 4: Not a lot, coupled with negative or cynical comments about Bicentenary. N = 5
2	1	200 years of fraud!
4	1	not that much. I took more notice of the Aborigines protesting about it. I think it was more important to them, but no-one seemed to involve them in the celebrations
10	1	not much, as Australia is a microcosm of the world; i.e., people from different nations yet there is discrimination for ethnics.What are we celebrating for since ethnics are not respected (i.e., comments made by political members in 1988)
27	2	not a lot. I thought there was a great waste of resources
28	2	not much, mostly 200 years of British domination

Subject No.	Group No.	Category 5: Increased awareness of Aboriginal issues. N = 5.
15	2	I think to me it highlighted the general ignorance of people in attempt to sustain a belief that the white settlement of Australia was at all good for the country
16	2	it was a period to learn about the history of the treatment, by white Australia, of Aboriginals. The message that Australians should be proud of the next 200 years meant nothing to me
35	3	200 years of oppressing the Aboriginal population of Australia justified by the fact that the oppressors are white
39	3	nothing different to any other year except that I knew that whites had been in 'Aboriginal Australia' for 200 years and in that time Aboriginal society went from primitive to nonprimitive
40	3	200 years of colonization of Black Australia. I'm not against the colonization, but I don't think we need to shout and sing about it. It didn't mean much to me; I wouldn't have missed it.

Question 3: What, in your opinion, were some of the positive features (if any) of celebrating the Bicentenary?

Subject No.	Group No.	Category 1: Increased awareness of Australian heritage and history N = 18
1	1	made people take stock to some extent
3	1	recognition of the good and bad aspects of Australia
4	1	showing just how far this country has come
7	1	people became aware of some aspects of their history
8	1	making people aware of how far Australia has come from its discovery. Being only 200 years old in comparison to countries that are thousands of years old, the country has become quite well developed in such little time
9	1	some people may become more socially and politically reflective
12	1	it did create more interest in Australian history
14	1	it was also good as it revealed some of our earlier past and made some Australians more aware of their history as a nation
22	2	more people would have become aware of what actually happened when the 'whites' arrived
23	2	made people aware of the fact that we are a nation that is building itself up among the nations of the world
26	2	many people were or became more aware of Australia and what 'she' stood for. Made attempt to bring people's attention to the great things Australia has done in its short period of white settlement
28	2	history of first European Australians
29	2	national awareness
30	3	the settlement of white man in Australia 200 years ago
31	3	made a lot of people realise how great Australia is
37	3	made us aware of our past - good and bad
41	3	helping people realise our great heritage
42	3	celebrating the history of Australia and what we have achieved over that time

Subject No.	Group No.	Category 2: Pride and patriotism. N = 9
3	1	helped in finding a 'true' Australian culture. Encouragement of patriotism and unity
10	1	some form of national day where patriotic people can show their love towards their country (the history of, and its achievements)
17	2	it made Australians stand up and be 'Austalian'. It built up a national pride which had been lacking over the last few years
19	2	awareness of who you are, and that you are an Australian and should be proud of it
20	2	give Australians confidence/proud to be Australian
29	3	individual pride of being an Australian
33	3	Sydney Harbour was a truly spectacular sight and showed the patriotism of the people
34	3	a more determined and positive outlook upon the Australian community as a whole
43	3	to develop pride in a country which often puts itself down

Subject No.	Group No.	Category 3: Unification of people. N = 9
20	2	attempted to unify the different subcultures, as one people - Australians!
21	2	bring all together and meet people
24	2	it did bring together groups of people in an atmosphere of frivolity and good will
25	2	celebrations tend to loosen people, more chance of getting to know new people; e.g., neighbours, etc.
26	2	it did bring some people closer together
29	2	social comradeship
33	3	Australia Day was the only highlight of the year for me. It was an Australian occasion and all the people came together
40	3	it was an excuse to unite Australians together, which is good, but the very nature of the Bicentennial itself is hardly going to unite whites with blacks in this country - which is what it needed most
41	3	people were involved in celebrations with people whom they hadn't known before, creating stronger bonds between Australians

Subject No.	Group No.	Category 4: Bicentennary activities and events. N = 8.
3	1	activities such as Expo, the Tall Ships and other historical activities
7	1	it was good excuse for a long holiday and lots of social functions
13	1	many festivals - that's all
14	1	it gave Australia the opportunity for many Australians to take part in activities which may in fact be a once in a lifetime opportunity
18	2	lots of events and parties! A big occasion, lots of advertising and media
21	2	celebrations - leisure activities for people
27	2	the Tall Ships and the sail training offered to young people now and in the future
36	3	the Australia Day celebrations in Sydney Harbour, and the Tall Ships sailing around the country; Expo in Queensland

Subject No.	Group No.	Category 5: Increased awareness of Aboriginal issues. N = 6.
1	1	groups such as the Aboriginals got to voice their opinion that 200 years of white occupation wasn't necessarily great for everyone - this may have altered some people's perceptions
11	1	the way the Aborigines expressed their feelings about their history and the part Europeans played in it
15	2	helped create an awareness (accidentally) of the many social problems facing Australia
16	2	gave the Aborigines a good opportunity to express their opinions. Early settlers' treatment of Aboriginals was put under the public spotlight
20	2	drew into the public view the holocaust of Aboriginal people
22	2	people more aware of what rights the 'blacks' do have

Subject No.	Group No.	Category 6: Increased international awareness for Australia. N = 4
17	2	provided Australia with a great deal of international promotion, especially in America, Asia and Europe
31	3	made other countries aware of Australia and its potential
32	3	show the world how much Australia has developed in only 200 years
38	3	may have created interest from overseas as a boost to our tourism opportunity

Subject No.	Group No.	Category 7: Miscellaneous. N = 6
2	1	none
6	1	not very many. Possibly the Aboriginal cricket team
23	2	built itself up from being known only as a penal colony
31	3	helped tourism
32	3	to show everyone that Australia is a great place to live. To thank Australians for making Australia what it is
39	3	settlement for 200 years

Question 4: What, in your opinion, were some of the negative features (if any) of celebrating the Bicentenary?

Subject No.	Group No.	Category 1: Aboriginal issues. N = 24
2	1	Aborigines were left out
3	1	the position and feelings of Aboriginals weren't considered much
4	1	the Aborigines
5	1	it must have been a slap in the face for the Aboriginal community
6	1	the entire bloody thing was a piece of self-congratulations to European settlement
7	1	ignored Aboriginal culture which has lasted for well over 200 years. It accounted only for white Europeans (particularly British) and did not include other cultures in this supposedly 'multicultural' society
10	1	Aboriginals and ethnics were not part of the celebrations (Aboriginals and ethnics put all of their efforts into this country as well). There is no 'true' meaning of an Australian so why weren't other races included in the advert, celebrations, etc?
12	1	it was also 200 years since the Aborigines were first invaded and mistreated
13	1	Australia isn't really 200 years old! White man just stole it off the Aborigines - kicked their heads off, etc.
14	1	I don't believe that proper recognition was given to the native Australians, the Aborigines
18	2	it allowed and actively supported the contamination of the abovementioned (that white settlement of Australia was at all good for the country) pathetically idiotic dream
22	2	through protests, etc., some people would have become hostile and more racist to blacks [Aborigines]
23	2	ignores the fact that Aborigines were here from practically the beginning of time, and that to build this 'great' nation, many, and in some cases whole Aboriginal communities were wiped out
25	2	stirred up a lot of racial tension with Aboriginals asking 'why celebrate?' Also racial tension for other groups
26	2	it in fact aroused anger in some parts of the community; e.g., Aboriginals - celebrating the Bicentenary of their being 'overtaken and killed'
29	2	I think the Aborigines could have thought it a little odd to see the Australian nation celebrating 200 years of white rule, when they themselves had been living in this country for thousands of years. I felt that they (Aborigines) should have had a little bit of empathy shown to them, and their culture
30	3	Aborigines have been in Australia longer than any white man and so to them I feel that in a way we have invaded their land. The Bicentenary, though, was only to celebrate white man coming to Australia but not to 'kick' the Aborigines out
32	3	the Aboriginal demonstrations. These, although they did have great effect, seemed to ruin part of the celebrations but I feel they had their right to demonstrate as we did take away their beautiful homeland
34	3	the bad publicity given surrounding the hostility shown toward the Bicentenary by some Aboriginal groups
35	3	I felt that it alienated groups in society, e.g., new Australians (migrants) - Aboriginals
36	3	the protests against the celebrations by some Aboriginal groups
39	3	settlement for 200 years on land where Aboriginals were driven from
42	3	not including Aboriginal history, offending the Aboriginal community
43	3	Aborigines argue that 200 years (as the birth of Australia) is a farce. I agree with them in a way.

Subject No.	Group No.	Category 2: Wasted money and financial cost. N = 18
3	1	a lot of money spent and possibly wasted
5	1	the large amounts of money spent on it that could have been put to far better use
11	1	the waste of money
14	1	if, as I believe it to be, the Bicentenary ran at a loss, then it could have been money not well spent. It shouldn't have been (as I hope it wasn't) a cost is no problem ... and the activities of the year should have been axed if they were predicted to lose large amounts of cash
15	2	it wasted money that could have been much better spent
16	2	waste of public money gone into celebrating
17	2	there was too much overspending in areas
19	2	the cost to the Australian taxpayers and the government
20	2	the cost
21	2	money could have been spent on other things; e.g., hospitals, welfare payments, etc.
25	2	lot of money wasted on things that didn't appeal to enough people
26	2	it wasted far too much money which could have been spent in many areas which need it to better the country, to pay off some or part of our debts and to increase standards of living
27	2	too much money spent
28	2	money spent on the Bicentenary could have been used for something more useful and helpful, e.g., hospitals, etc.
33	3	the amount of money spent on the events which were a total flop
37	3	a waste of a lot of money
40	3	the cost of the advertising annoyed me
42	3	a lot of money was wasted

Subject No.	Group No.	Category 3: Miscellaneous. N =12
1	1	widespread dissatisfaction with the way it was celebrated - feeling of it having been a good opportunity lost
8	1	none - there is no reason to not celebrate it
9	1	an attempt to mould the Australian people or placate them with spectacle
17	2	it was really only important to NSW. People started to get sick of it after a while
18	2	misleading people into thinking Australia is a great place economically
19	2	using the Bicentenary as a way of smoothing over the country's real problems
24	2	it didn't involve everybody equally as some things had costs attached that only the wealthy could afford
25	2	lots of projects started that mostly won't get finished
31	3	sometimes it was taken a bit too far and by the end of the year some people were getting a bit tired of hearing about it day and night
36	3	after a few months, the Bicentennial theme got a bit tiresome as there were so many events
37	3	a lot of people did not participate and therefore received little benefit
41	3	none

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NOTE:

This publication is included on pages 411-423 in the print copy
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