

ETHNOCENTRIC ATTITUDES AND PIAGET'S  
CONCEPT OF RECIPROCIITY

by

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## Abstract

One of the major propositions by which ethnocentric phenomena are considered to be described is Sumner's view that attitudes toward ingroups and toward outgroups are symmetrically correlated in such a way that the more positive the former, the more negative the latter. A corollary to this proposition, also attributable to Sumner, is that the most extreme sentiments -- ingroup idealization and outgroup derogation -- co-occur when loyalty or attachment to the ingroup is high.

Derived primarily from ethnographic information about various social groups, the proposition nevertheless gains support from a number of investigations carried out at the individual level of analysis. Despite this support, however, there are opposing views as to the role of ingroup attachment in individuals' attitudes toward groups, as well as experimental findings arguing against the direction of the correlative relationship as it is specified by Sumner.

Included in some of the contradictory findings is the suggestion that they are attributable, in some part, to developmental factors. In this regard, certain theoretical and experimental observations made by Piaget become significant. According to Piaget, the young child's point of view is initially an egocentric one, characterized by the belief that the attitudes arising out of his own surroundings and activities are the only ones possible. This gives way, by the end of childhood, to an awareness and understanding of others, and a more objective outlook. With the beginning of adolescence, however, egocentrism is reinstated -- though at the more abstract level of ideas and ideals -- but again gives way, eventually, to objectivity. As described by Piaget, this so-called "reciprocity" process

appears to include stages at which sentiments toward in- and outgroups co-vary in the same, rather than the opposite (Sumnerian), direction. There is also an implication that ingroup attachment comes to exist without the accompaniment of antagonistic attitudes toward others.

The aim of the present investigation was to determine, first, whether in- and outgroup ratings given by subjects of various ages corresponded with the Piagetian analysis and second, what the significance of this was to Sumner's proposition. To do so, semantic differential ratings of in- and outgroups were obtained from four groups of subjects whose modal ages were nine, twelve, fifteen, and twenty-one years. The ratings given by these subjects did, in fact, reflect the changes, with age, that had been observed or predicted by Piaget: the nine year olds showed a greater tendency to disparage outgroups than the twelve year olds, the twelve year olds a lesser tendency than the fifteen year olds, and the fifteen year olds a greater tendency than the twenty-one year olds. There was also an indication, contrary to Sumner's opinion, that feelings of ingroup attachment were not necessarily accompanied by ingroup idealization-outgroup disparagement attitudes. As regards the correlative aspect of Sumner's proposition, however, the results were less precise.

From a Piagetian standpoint, the responses of the nine and fifteen year olds were expected to demonstrate Sumner's predicted correlative relationship between in- and outgroup evaluations, while those of the twelve and twenty-one year olds were expected to show a relationship in the opposite direction. Only the three youngest groups gave ratings which appeared to agree with this analysis; correlations between the oldest subjects' in- and outgroup ratings were in the Sumnerian direction.

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## General Introduction

"A theory of ethnocentrism offers a starting point for the understanding of the psychological aspect of group relations - why individuals are inclined toward competition, or conflict, or harmonious interaction, and so on. It is concerned with such questions as: What kinds of general attitudes do individuals have about their own and other groups? What underlying ideas or themes run through an individual's thinking about groups and group relations? How do these ideas develop? How are they related to trends in the individual's thinking about social processes? What personality trends, if any, are they related to and in what way? How are they related to membership in class, church, political party, and so forth?" (Adorno et al, 1950, p.102)

Though the comments above reflect a psychological point of view, it was a sociologist, W. G. Sumner, who first used the term ethnocentrism, defining it in 1906 as the "view of things in which one's own group is the centre of everything and all others are scaled and rated with reference to it" (Sumner, 1906 [1960, p.27]). Since Sumner's time, the findings reported in a large and growing number of articles have demonstrated the ubiquity of ethnocentric phenomena (Dollard, 1938; Williams, 1947; Sherif and Sherif, 1953; Gregor, 1963; Druckman, 1968, are but a few examples). Thus, the tendency to perceive other groups and their members in the light of the values of one's own group has become an object of theoretical and experimental interest to psychological, as well as other, investigators.

It is generally true, however, that sociological and anthropological views have had the greatest influence on theories about ethnocentrism. Consequently, investigation has often been restricted to the group level. Thus, for instance, it has been documented that Papuans form village units which are kept separate by inter-village hostility, that the Seri of Lower California observe an attitude of suspicion and hostility to all

outsiders (Sumner, 1906 [1960, pp. 28-29]), that the Wailbri aborigines are indignant at being confused with Pintubi aborigines (Gregor, 1963), and so forth, but whether such attitudes are pervasive in all Papuans. all Seri, or all Wailbri is not generally reported. The study of ethnocentrism at the individual level of analysis has, with few exceptions, been relatively de-emphasized.

One of the exceptions is the major work of Adorno, Frenkel-Brunswick, Levinson and Sanford reported in The Authoritarian Personality (1950). Part of the thrust of this work lies in its demonstration of individual differences in ethnocentrism within a single ethnic group. While certain conclusions put forward in The Authoritarian Personality have been challenged -- as in Sherif and Sherif's rejection of the idea that frustrations and deprivations in the family situation are the prime cause of hostility toward other groups and their members (1953, pp. 116-132) -- there has been no apparent disagreement with the contention that members of a group may differ markedly in the way they perceive and evaluate other groups. Similar findings have been reported by other investigators, most notably Rokeach (1960, pp. 302-303), who has shown that individual differences exist in the extent to which members of one group will accept or reject the beliefs held by members of other groups.

Yet whatever the level of analysis, it is certainly true, as Campbell and LeVine (1961, p.83) claim, that "while facets of the theory of ethnocentrism have been subjected to considerable direct investigation... the great bulk of its propositions are unverified in any formal way". One of these propositions, they note, calls for a uniform co-occurrence of ingroup adulation and outgroup hostility. To Campbell and LeVine, "it is far from self-evident that these two must always go together" (p.64)

and they have initiated a research program to consider the point in some detail. The predisposition of these investigators is to carry out their research at the level of groups. They do, however, concede that the approach through individual differences is a parallel one. In accordance with the belief that a wide diversity of approaches and levels of analysis are appropriate for inquiries of this nature, the purpose of the present investigation will be to consider the proposition within the latter context.

As with many of the propositions which make up a theory of ethnocentrism, the one which posits a co-occurrence of ingroup adulation and outgroup hostility can be traced to Sumner. It was his view that, when a group "nourishes its own pride and vanity, boasts itself superior, exalts its own divinities", it "looks with contempt at outsiders"; when a group "thinks its own folkways the only right ones", it is scornful of "other groups and other folkways"; when a state "regards itself as the leader of civilization, the best, the freest, and the wisest" it regards "all others as inferior" (Sumner, 1906 [1960, pp.28-29]). While it seems to be his intention, in these statements, to posit a symmetric link between ingroup idealization and outgroup hostility, Sumner was not unaware of lesser degrees of affect in in- and outgroup sentiments. Usually, therefore (though Sumner himself did not specifically phrase it in these terms), the proposition has been taken to mean that a symmetric correlative relation exists between ingroup evaluation and outgroup evaluation such that the more positive the former, the more negative the latter. In addition, it was Sumner's view that "Loyalty to the group, sacrifice for it, hatred and contempt for outsiders, brotherhood within, warlikeness without" were "common products of the same situation" (p.27). This state-

ment, taken together with those which seem to imply a symmetry in in- and outgroup evaluations, produces the corollary that the most extreme sentiments -- ingroup idealization and outgroup disparagement -- are expected to obtain when ingroup attachment is high.

Sumner supported his points of view with numerous example (Sumner, 1906, 1927), and Campbell and Levine (1961) have noted, after a survey of The Human Relations Area Files (a more recent source of information than those used by Sumner), that those data which relate to ethnocentrism "do not seem to contradict Sumner's bold generalization" (p.84) on the co-occurrence of the extreme sentiments. But such evidence as exists in support of Sumner's position comes almost entirely from group level studies where differences within the group are not reported. Only a small amount of information exists which is relevant to this particular consideration. One such source is Adorno et al (1950). In a review of the responses given by an individual they characterize as highly ethnocentric to statements describing in- and outgroups, these investigators draw attention to the fact that "idealization of the ingroup is as marked as ... hostility toward outgroups" (p.143).

Pertinent to the correlative direction specified by the proposition are the following results. Levinson and Sanford (1944) studied anti-Semitic attitudes in a group of white, Christian, college women and found that increasing approval of anti-Semitic statements, the American Legion, and certain contemporary leaders was accompanied, in general, by increasing opposition to labour unions, racial equality, socialism, and the U. S. Communist party. A major finding of a pre-election survey by Sherif, Sherif and Nebergall (1965) was that the more extreme the preference for one set of candidates, the greater the level of rejection of the unpreferred set. Druckman (1968) has reported a correlation of -0.48

*dissonance?*

between ratings of own-nation members and ratings of enemies given by subjects participating in the Inter-Nation Simulation game. He takes this result as supporting "the major proposition of 'ethnocentrism theory' which posits a correlational relationship between ingroup adulation and outgroup derogation" (p.61).

Despite these various kinds of evidence relating different aspects of Sumner's proposition to the individual context, there are other views that disagree with Sumner's, and other findings that do not support his predictions. Allport, for instance, holds that "Attitudes partial to the ingroup...do not necessarily require that attitudes toward other groups be antagonistic" (1954 [1958, p.45]). More specific to the ingroup attachment aspect of Sumner's proposition is the opinion of R. K. Merton:

"Lacking any but the most primitive conceptions of psychology, Sumner too soon and without warrant concluded that deep allegiance to one group generates antipathy toward other groups...Sumner described an important, but special case as though it were the general case. He assumed, and his assumption has been echoed as established truth on numerous occasions since his day, that intense loyalty to a group necessarily generates hostility toward those outside a group" (1949, p.298).

Data collected by Paranjpe (1966) and by Paranjpe and Caddick (unpublished data) give empirical support to Allport's argument. Semantic differential ratings of sub-caste, caste, and religious groups were obtained from 369 college students in India, as were semantic differential ratings of self-chosen in- and outgroups of various degrees of importance from 149 Canadian college students. The differential scales were primarily evaluative but included, as well, "social distance" and "identity" scales. For the Indian sample, the median rating of the most positively rated group was 1.7, substantial enough, on a 7-point scale running from 1 (positive) to 7 (negative), to indicate a high level of idealization. The median rating

of the most negatively rated group was 5.0 which, though within the negative half of the scale, was certainly not interpretable as hostility, hatred, scorn or contempt. In fact, only five individuals assigned over-all ratings of 7 to outgroups, as compared with forty-two who assigned overall ratings of 1 to ingroups. For the Canadian sample, the median ingroup ratings were 2.2, 1.7, and 1.8, also indicative of a certain amount of idealization, with corresponding median outgroup ratings of 4.5, 4.4, and 4.3. In addition to showing that attitudes partial to the ingroup need not be accompanied by antagonistic attitudes toward others, both the Indian and the Canadian data also pointed out that attitudes of ingroup idealization and outgroup rejection need not necessarily co-occur.

The lack of co-occurrence of the extreme sentiments does not, of course, rule out the possibility of a non-symmetric correlative relationship in the specified direction. Thus the semantic differential scores referred to above still provided a means of testing for the proposed direction of covariation. Here too, however, the results did not generally support Sumner's prediction, for the correlations between in- and outgroup ratings were -0.20 for the Indian sample and -0.07, +0.18, and +0.14 for the Canadian sample. Data presented by Sullivan and Adelson (1954) are also contradictory: they found that authoritarians were not simply antagonistic to groups specified on the E-scale but, in addition, to groups in which they were necessarily members. This general misanthropy can be taken as arguing against the direction of the relationship between in- and outgroup sentiments predicted by Sumner, since it implies that similar attitudes are held toward all groups. Still further data opposing the correlative aspect of Sumner's proposition have been reported by Rokeach (1960), who assessed the attitudes of northern and southern white college students towards Negroes and whites

holding certain racial and general beliefs. To begin with, Rokeach found for both groups of subjects that the greater the rejection of Negroes, the greater the rejection of whites. In addition, the responses allowed consideration of whether any relation between "our liking of those who agree with us" exists, a question which seems within the realm of what is meant by ethnocentrism. As Rokeach states, "the correlations are .60 and .43 for the northerners and .20 and -.14 for the southerners. In the North, the more we like those who agree with us the more we like those who disagree with us; in the South, there seems to be little or no relation between the two" (p.145).

That these data are contrary to Sumner's proposition is clear. What is not immediately apparent is how a reconciliation may be effected. An observation by Rokeach is, however, insightful. In addition to the attitude assessment carried out with northern and southern college students mentioned above, Rokeach tested 50 middle class Jewish children, ranging in age from 7 to 16, to determine their attitudes towards Jews and Gentiles holding certain ethnic and other beliefs. Again it was possible to test for a relation between "our liking of those who agree with us and those who disagree with us" but this time the degree of acceptance of those who agree was negatively related to the degree of acceptance of those who disagree. Asks Rokeach, "Is it possible that the correlations between liking for those who agree and disagree with us change from negative to positive as a result of increasing maturity?" (1960, p.152). As it happens, there is a theoretical position dealing specifically with this point.

The investigations of Jean Piaget are more properly characterized as developmental than as social psychological. In a 1951 paper, however, he has reported observations which are connected with the latter area and, even



more specifically, with the matter under consideration. In this paper, Piaget concerns himself with the development in children of the idea of the homeland and of relations with other countries. Notwithstanding Rosenblatt's (1964) caution that ethnocentrism and nationalism "do not overlap completely", Piaget's observations seem potentially meaningful to the more general area of ethnocentrism. According to Piaget, the young child "begins with the assumption that the immediate attitudes arising out of his own special surroundings and activities are the only ones possible: this state of mind... may be called unconscious ego-centricity" (p.562). As the child grows older, his life experiences require him to "make a considerable effort toward 'decentration', or broadening of his centres of interest" (p.562) so that he is constantly required to integrate the impressions and experiences of new surroundings and activities with his past ones. In the course of these efforts at deccentration and integration, the child begins to acquire an attitude of "reciprocity", or an awareness of groups and points of view different from his own. Reciprocity apparently develops out of experiences by the younger child that "others" (peers, adults) may have views different from his but which turn out to be no less acceptable, and out of the intellectual realization by the older child that a cognitive and affective symmetry exists between what he classifies, and favours or disfavors, as his "own" (ingroups) and "others" (outgroups), and what others regard as their "own" and "others". By the age of about twelve years, according to Piaget, children will claim a strong ingroup attachment, but in evaluative comparisons between ingroups and other groups they characteristically view both as more or less the same. Piaget cites the following examples as representative (included in parentheses are the subjects' initials and ages):

With regard to the child's own country:

"I like Switzerland because we never have any wars here" (J.N.-10;3).

"I like Switzerland because it's a free country" (L.O.-11;2).

"I like Switzerland because it's the Red Cross country. In Switzerland, our neutrality makes us charitable" (M.G.-11;5) (p.567).

With regard to other countries:

"Are some better, more intelligent, more likeable? I don't know, they're all much the same, each has its own mentality" (M.A.-11;9).

"Are there any differences between all these countries? There is only a difference of size and position between all of these countries. It is not the countries that make the difference, but the people. You find all sorts of people everywhere" (J.B.-13;3) (p.571).

With regard to an evaluative comparison:

"If you had no nationality...which would you choose?"

Swiss nationality. Why? Because I was born in Switzerland and this is my home... Who do you think is nicer, the French or the Swiss, or do you think they are just the same? Oh, on the whole, they're much the same. There are some very nice Swiss and some very nice French people, that doesn't depend on the country. Who is more intelligent, a Swiss or a French person? All people have their good points. The Swiss don't sing too badly and the French have some great composers". (A.R.-12;6).

"Choice of nationality. I'd choose to be Swiss. Why? Because it's my country and I love it. Who do you think are nicer, the Swiss or the French? They're just the same as each other. It doesn't depend on the country, but on the people. And who are more intelligent, the Swiss or the French? That's the same thing too..." (J.C.-13;4) (pp. 577-578).

In reaching the stage illustrated by these children, Piaget argues that

a necessary accompaniment is the attainment by the child of an intellectual understanding of what is meant by "country", particularly its existence as an entity which includes certain groups in the child's experience or knowledge (town, canton, and so on), and which excludes others. He does not suggest that this cognitive component precedes the appearance of affective feelings. Indeed, to Piaget, "the cognitive and affective aspects may be said to be parallel or isomorphic" (p.563). Thus, at cognitive stages earlier to the basic understanding of the inclusion of the part within the whole, likes and dislikes may be "bound up with subjective or personal impressions of the most fleeting or even accidental kind" (p.566) (about age seven), or in accordance with family traditions (about age nine). In the latter case this will likely involve "a kind of tribal outlook, with values based on the disparagement of other social groups", although any "favourable estimates are accepted like the others" (p.570).

Comparable trends have been observed in other investigations of national feelings. For instance, Weinstein (1957) traced the development of the concept of flag and the sense of national identity in American children and obtained the following results. At about 5 or 6 years of age the child "does not know of other countries and denies the possibilities of other flags" (p.171). By eight years of age "the American flag is now best because 'America is the best country.'" (p.172). At about ten years, the child begins to feel that "the American flag is no longer best without qualification: 'If I lived in a different country and liked the way things were I would probably think their flag is best'" (p.173). The progression illustrated by these quotations seems closely parallel to the movement from ego-centricity to objectivity proposed by Piaget.

A similar trend is also demonstrated in experiments by Tajfel et al

(1970), where subjects from six to twelve years of age were asked to sort photographs of men in accordance with whether or not they were liked and whether or not they were of the subject's nationality. These investigators found that a general tendency to assign better liked photographs to own national category dropped off with age. To them it seemed possible "that in the older age group, separate cues begin to function for liking and for nationality assignments, that an effort is made by children to approach the two kinds of judgments with different criteria" (p.251). This finding is also commensurate with Piaget's analysis.

The reciprocity concept is presented by Piaget as being consistent with the developmental events by which the normal child attains an awareness of his own homeland and other countries. Assuming the generalizability of his observations to other kinds of group comparisons, predictions can be derived which, at certain points, are incompatible with those derived from Sumner's proposition. For instance, it is Sumner's contention that when there is loyalty and attachment to the ingroup, a co-occurrence of ingroup idealization and outgroup rejection can be expected. From a Piagetian perspective, however, this would seem to characterize only the "tribal outlook" stage since, in older children, ingroup attachment appears to exist without the accompaniment of the idealization-rejection syndrome<sup>1</sup> (as in J.C.'s responses above). Furthermore, a correlative relation in the opposite direction to that predicted by Sumner is deducible from the responses of Piaget's older

<sup>1</sup>An exception to this is Piaget's unclarified remark, in the 1951 paper, that extreme forms of sociocentrism may later emerge in some individuals "if the same obstacles that impede the process of 'decentration' and integration...crop up again at all levels". Unfortunately, no indication is given as to what these obstacles might be although, in a later article, Piaget mentions that "social processes involving constraint and authority... [may] lead to a sociocentrism closely akin to ego-centrism" (Piaget, 1970, p.729). In acknowledging the existence of such special cases, Piaget's position seems close to that of Merton's which was cited earlier.

subjects that in- and outgroups are "much the same". If it is, in fact, true that older children see little difference existing between in- and outgroups, then those rating ingroups positively should also rate outgroups positively, and those rating ingroups negatively should rate outgroups negatively. Thus, for example, subject A.R. above sees both the French and the Swiss as "very nice", while subject J.C. sees them as "just the same", but apparently not as positively as A.R.

It would seem then, that included within Piaget's observations are points of particular significance to Sumner's proposition. In what follows, experimental attempts to determine the extent of this significance are reported.

## Experiment I

### Introduction

Though his specific concern was with nations and nationalism, Piaget prefaced his report with remarks that the information he was about to present was of value in "studying social and international tensions in general". Presumably, this extension to other group contexts was considered valid because of the conceptualization of reciprocity development as a decentering process involving experiences with a wide variety of entities classifiable as "groups". But despite Piaget's claim, the generalizability of the concept was by no means proven by the rather specific data he provided. For this reason it seemed appropriate to determine whether children's attitudes in a variety of group comparisons showed the kinds of trends expected on the basis of Piaget's observations. Experiment I was carried out for this purpose, and with the intention that Sumner's proposition would be evaluated in the light of the findings.

A number of considerations influenced the conduct of the study, one of the most important being the choice of subjects. Typically, Piaget had presented reciprocity development as a stage-dependent process, the characteristics of each stage being as briefly summarized in Table 1. Stage I children were felt, on the basis of their description, to be beyond the present interest: they seemed unlikely to be familiar with even simple group names and unlikely to be consistent, in any logical way, about their likes and dislikes. Moreover, demonstrations by Long, Henderson, and Ziller (1968) that younger children are susceptible to an "extremity response set" which gives rise to highly polarized kinds of evaluative responses, and by Di Vesta (1965) that younger children rely heavily on evaluative modes of qualifying experience, suggested that spurious factors were likely to be encountered

TABLE 1

Important Characteristics of the Piagetian Stages in the Child's

Development of the Idea of Homeland and Relations with Other

Countries (inferred or abridged from Piaget, 1951)

Stage 1

- about seven years of age (inferred)
- group classifications are known in name but not in meaning.
- group likes and dislikes are indiscriminate and bound up with subjective and personal impressions of the most fleeting and even accidental kind.

Stage 2

- about nine years of age (inferred).
- group classifications are understood but the inclusion of some groups within others is not.
- family loyalties and traditions begin to predominate over purely personal motives; the acceptance of family values generally results in a tribal outlook with values based on the dis-  
paragement of other social groups; favourable evaluations of groups are, however, also accepted.

Stage 3

- about twelve years of age (inferred)
- group classifications are understood, as is the inclusive-exclusive nature of groups.
- the most general collective ideals, beyond personal feelings and family loyalties, begin to take effect; realization of a wider community of values distinct from those of the ego, the family, and other visible or concrete realities removes the tendency to stress contrasts between own and other groups.
- reciprocity of points of view begins to be understood; while the child may prefer his own group, he shows resistance to suggestions that other groups are inferior and, in terms of general characteristics, sees other groups in much the same light as his own.

- the child is, for the most part, unaware of the points of view of others.

- the child is able to place himself in the position of others and understands, to a certain degree, the relativity of modes of classification and affective attachment, but he is unable to take the further step which results in understanding the fundamental acceptability of both points of view.

in children at this stage. Since Stage II children were expected to be more stable in their likes and dislikes, more fluent with group classifications, and likely to exhibit a "tribal outlook, with values based on the disparagement of other social groups", and since Stage III children were expected to show some level of understanding and acceptance of diverse points of view, the points of interest seemed best evaluated by dealing exclusively with children considered to be at these stages.

Flavell (1963) has noted that, with any Piagetian stage-dependent theory, "the sequence of developmental steps is thought to be invariant, while the chronological age at which each occurs is definitely not" (p.264). Thus the inferred ages of about nine years and twelve years which were available from Piaget's descriptions of the Stage II and Stage III child, respectively, were clearly not to be taken as exact. Nevertheless, this indication of an age difference of about three years between the appearance of "typical" Stage II symptoms and "typical" Stage III symptoms argued, in practical terms at least, against an investigation employing a longitudinal approach. It was recognized, of course, that with a cross-sectional study it would be impossible to control for individual differences in rates of development. Moreover, conditions prevailing when the older subjects were the age of the younger subjects could certainly be expected to result in a lack of strict developmental comparability between subject groups of different ages. As a result, the decision to employ a cross-sectional method of testing represents a major shortcoming in the present investigation. But even a cross-sectional approach is made difficult by Piaget's refusal to give more specific age co-ordinates to the stages. It was finally decided that groups with modal ages of nine and twelve, such as grade four and grade



seven school children, would provide a degree of age variance within which Stage II and Stage III symptoms might reasonably be expected to appear.

A sample size of about one hundred for each stage was felt to be adequate for the statistical treatments envisioned. It became apparent, however, that since it was possible to recruit almost all the subjects from one school, some local factor such as socio-economic level could operate so as to affect the results. A few investigations have, in fact, suggested a possible negative relationship between socio-economic status and ethnocentrism (Brown, 1965, pp. 518-523), and there was no mention in Piaget's report that the socio-economic background of his subjects had in any way been controlled.<sup>1</sup> Testing in different localities was therefore considered desirable. For the present study it was possible to recruit subjects from two schools in an area characterized by its school board officials as "lower middle class" and from one school in an area characterized by its school board officials as "upper middle" to "lower upper" class.

Other factors, also important to the conduct of the experiment, are more properly dealt with in the treatment of methodology. A reading of the "Note on Methodology" (Appendix A) might usefully precede any consideration of what is to follow.

#### Method

Subjects. A total of 377 subjects, all public elementary school children, were tested. Of these 195 were grade four students and 182 were

<sup>1</sup>Indeed, Flavell (1963, p.430) has pointed out that socioeconomic background has not generally been a variable of much interest to Piaget and that most of his subjects are probably selected "on the basis of age and ready availability" (p.431). It does not seem unreasonable that, by this last criterion, a large proportion of Piaget's subjects could have been from the higher classes of Geneva society.

grade seven students. Roughly one-third of each were children of a higher socio-economic background as defined above. The age range, to the nearest year, for the grade fours was eight to ten, with a modal age of nine; for the grade sevens, the age range was eleven to fourteen, with a modal age of twelve. The only differentiation made between subjects was the socio-economic one. As the total enrolment (less absentees) of grade fours and grade sevens in each school was tested, a range of IQ and a reasonably representative split by sex was expected, but these were not assessed.

Means of Testing. Each subject was required to complete a "paper and pencil" test booklet, examples of which may be found in Appendix B. Basically, the testing device was a battery of semantic differential scales with which the subjects rated "the people who live" in cities, provinces (grade sevens only), and countries chosen as "most" and "least" preferred. One choice of each was made from lists of cities, provinces, and countries that the subject had previously composed on his own, in accordance with no specified purpose. The scales were: friendly-unfriendly, bad-good, wrong-right, smart-dumb, wonderful-terrible. An individual's scores were obtained by assigning values of 1 to 5 (negative to positive) to the choice points between scale poles and summing responses over the five scales. The range of possible scores for any concept was thus 25 to 5. Each of the grade fours rated city groups first, then country groups. For the grade sevens, the rating sequence was systematically staggered.

Also included was a pre-test to detect response bias (see Note on Methodology, Appendix A, p.69), and a question designed to assess the child's understanding of the inclusive-exclusive nature of groups.

Procedure. All testing was carried out by the students' regular teachers

in a classroom setting. No special introduction other than that a "survey" was being made accompanied the presentation of the booklets. The subjects were asked to complete one page at a time. For the grade fours, the teachers paced the subjects by reading slowly through the booklet as it was being completed; the grade sevens worked under teacher supervision but without teacher direction. Subjects indicating that they felt certain scales to be inappropriate were told to "use your imagination" in responding to these scales; subjects expressing lack of contact with a chosen group as precluding their ability to rate were told to give a general impression in accordance with what they had heard, read, seen on television, and the like.

#### Results

Certain losses preceded the evaluation of the data. To begin with, 17 percent of the grade fours and 7 percent of the grade sevens were eliminated from the originally sampled population through incompleteness or misunderstanding of the questionnaire booklet. These proportions compared favourably with pilot study experience and were not considered unusual. A further 14 percent of the grade fours and 13 percent of the grade sevens were eliminated by the pre-test designed to detect response bias. Although this represented a substantial loss of useable information, the lessening of the possibility of spurious correlations justified it. As a result of these losses, the responses of 134 grade fours and 151 grade sevens remained for consideration.

With these data (i.e., the remaining grade four ratings of four groups and the remaining grade seven ratings of six groups), Hotelling's  $T^2$  comparisons within each grade were made between the two socio-economic levels. As no significant difference between the levels emerged for either

grade (grade fours:  $p < .20$ ; grade sevens:  $p < .20$ ) the separation by socio-economic level was thereafter ignored and each grade considered as a whole.

An initial requirement was to locate the general position of the younger and older children in the reciprocity development process. This was accomplished by assessing their position in the supposedly concomitant process of understanding the inclusive and exclusive nature of groups. It will be recalled that, at Stage II, Piaget's subjects did not generally believe that they could be a member of a country, and a city in that country, at the same time but that, by Stage III, this misconception had disappeared. For the present subjects, 62 percent of the grade fours and 93 percent of the grade sevens were able to give the correct response to the question dealing with this point. This suggested that, as a group, the grade fours were somewhat beyond a "pure" Stage II position and thus best characterized as transitional; the grade sevens, though perhaps not corresponding exactly, were apparently close to Stage III. That neither of the samples was entirely "typical" as regards Piaget's stages was, of course, inevitable with the cross-sectional method of testing used since no control over individual differences in development was employed.

Piaget's implication that his reciprocity concept is applicable to group considerations in general suggests that a child's attitudes toward a variety of ingroups or his attitudes toward a variety of outgroups should be more or less uniform, and in accordance with his position in the reciprocity development process. Since the children tested each gave ratings for more than one pair of in- and outgroups, it was possible to test for the uniformity aspect in terms of the consistency of their semantic differential concept scores. In doing so, the following rationale was employed: to be indicative

of uniformity, all of a subject's ingroup scores were required to be within 3 points of one another, as were all of his outgroup scores<sup>1</sup>; and all of the groups in each category (i.e., ingroups or outgroups) were required to be rated in either the positive or the negative range of scores (the middle score, 15, was allowed to fall into either half). By these standards, the following results were obtained:

Ninety-three percent of the grade fours and 90 percent of the grade sevens made responses that could be considered, in some degree, consistent. These proportions could, however, be broken down further. For the grade fours, 60 percent rated both of their ingroups in a relatively uniform manner, as well as both of their outgroups; 33 percent rated the groups in only one of the categories consistently. For the grade sevens, 40 percent rated all three of their "most" preferred groups in a relatively uniform manner as well as all three of their "least" preferred groups; 40 percent were consistent with regard to all three of the groups in one of the categories but only two in the other. The remaining 10 percent were consistent with regard to two of the groups in each category but, because of the ultimate interest in analyzing the data in ingroup-outgroup pairs, this latter proportion only included cases where the ratings considered to be consistent were all included in two of the three pairs. Table 2 summarizes these findings, which support the view that a child will tend to see ingroups in a similar fashion, as well as outgroups.

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<sup>1</sup>The value of 3 was determined as follows: it was assumed that a 5 point difference between the total score ratings of groups in one category (i.e., ingroups or outgroups) indicated an average change in one position on each of the five semantic differential scales used in rating or, in other words, a change in the degree of sentiment expressed on each scale. Zero difference was assumed to indicate no change. A total difference of 3 points, taken as the rounded-off average between these two, provided some flexibility without permitting an overall change in attitude toward the attitude object.

TABLE 2

Percentages of Children Whose Ingroup and Outgroup Ratings  
Were Totally, Partially, or Not At All Consistent

	All ingroups, all outgroups consis- tently rated.	All groups in one of the categories, one (Gr.4) or two (Gr.7) in the other consistently rated	Two groups in each category consis- tently rated*	Completely incon- sistent ratings
Grade fours, rating four groups, N=134	60	33	-	7
Grade sevens, rating six groups, N=151	40	40	10	10

\* Includes only those cases where ratings considered to be consistent were all included in two of the three ingroup-outgroup pairs.

Since Piaget's position is that his developmental stages are characterized by integrated, homogeneous behaviour (Flavell, 1963, p.20), the finding above that a number of subjects gave one or two inconsistent ratings can be taken to confirm the earlier indication that the subjects corresponded imperfectly with the "pure" stages being considered here. At the same time, this particular confirmation raises an important question. If the subjects are not "typical" vis à vis Piaget's "pure" stages, and if between-stage behaviour is thought to be "a mélange of organized but inappropriate earlier structures and...as yet incompletely organized new structures" (Flavell, 1963, p.21), then which of a subject's responses are appropriate in testing for features expected on the basis of Piaget's "pure" stages? In view of the indication, in Table 2, that "within individual" consistency is fairly general, the proper approach would seem to be to employ only the consistent responses since these, presumably, reflect a subject's prevailing point of view. For this reason, therefore, two additional reductions in the data were made. These included the elimination of the responses of the completely inconsistent subjects and the elimination of the inconsistent responses of the partially consistent subjects. The first was simply the removal of the small number of apparently non-representative subjects: 7 and 10 percent of the younger and older children, respectively. The second was in accordance with the view that, by eliminating the inconsistent rating from a subject's set of otherwise consistent responses, it is probably the developing, and, more than likely, the prevailing attitudes about in- and outgroups that are being given consideration. Unfortunately, because subsequent analyses involved the use of paired ratings, this made it necessary to eliminate altogether the responses of the grade fours who were only partially consistent. Since they rated only two pairs of groups, no decision was possible as to which of the

two pairs properly indicated their prevailing attitudes in ingroup-outgroup comparisons. Despite this loss, however, the responses of a majority of the younger children -- 60 percent -- still remained. As for the grade sevens, only the removal of one pair of ingroup-outgroup ratings for each of the subjects considered to be partially consistent occurred. Thus the responses of 90 percent of the older children were still retained for analysis, though in any one of the three pairs of ingroup-outgroup comparisons roughly three-quarters of the grade seven responses were involved. Tables 3 and 4 present the results obtained from these data which are pertinent to the predictions derived from Piaget's observations.

The information provided in Table 3 relates to the frequency with which ingroup idealization and outgroup hostility responses were made by the older and younger children. "Idealizer" status was taken to accrue when the individual's total score for the ingroup being rated was greater than 20 since, for these cases, at least one of the rating scales was marked at the positive extreme and the remaining scales generally positively. In a similar fashion, total scores of less than 10 were interpreted as indicating outgroup disparagement. By this method of response classification, it was possible to evaluate key aspects of both the Sumnerian and the Piagetian views. For example, Table 3 shows that the symmetric aspect of Sumner's proposition was not supported, since instances of ingroup idealization greatly outnumbered instances of outgroup disparagement in either age group. More will be said about this later. As for the Piagetian point of view, if it is recalled that his Stage II subjects showed a tendency to disparage outgroups and that his Stage III subjects did not, then it is clear that while the grade fours did not reject outgroups to the degree that might have been expected, an appropriate trend was demonstrated. Thus, though only 9



TABLE 3

Percentage-wise Categorization of Response Type for  
Each of the Ingroup-Outgroup Pairs

	City Comparison (Grade 4, N=81; Grade 7, N=112)		Province Comparison (Grade 7, N=115)		Country Comparison (Grade 4, N=81; Grade 7, N=101)	
	Disparaged Outgroup	Did not Dispar- age Outgroup	Disparaged Outgroup	Did not Dispar- age Outgroup	Disparaged Outgroup	Did not Dispar- age Outgroup
Grade fours	9	54	37	11	56	32
Grade sevens	4	46	49	3	40	57
	Did not Idealize Ingroup	Idealized Ingroup	Did not Idealize Ingroup	Idealized Ingroup	Did not Idealize Ingroup	Idealized Ingroup
	Idealized Ingroup	Did not Idealize Ingroup	Idealized Ingroup	Did not Idealize Ingroup	Idealized Ingroup	Did not Idealize Ingroup

and 12 percent of their city and country outgroup ratings suggested hostility, these proportions were larger than those of 5, 3, and 3 percent found with the grade sevens' ratings of city, province, and country outgroups, respectively. The grade fours were also expected to idealize their ingroups and, as can be determined from Table 3, did so in 63 percent of the city and 67 percent of the country ratings. By comparison, 50 percent of the grade sevens' ingroup city ratings, 41 percent of their ingroup province ratings, and 43 percent of their ingroup country ratings, involved idealization.

Table 4 relates to the correlative aspect of in- and outgroup evaluations. The correlations reported have been dis-attenuated by the application of coefficient "α" reliabilities discussed in Appendix A (See page 75). (Since coefficient "α" values ranged from 0.73 to 0.88, dis-attenuation did not inflate the rather low correlations to any great extent). Table 4 presents a further breakdown for the grade sevens: it will be recalled (see footnote, page 11) that Piaget viewed Stage III reciprocity attitudes as a "normal" development and implied that individuals in whom extremes of ingroup animity were accompanied by extremes of out-group enmity, for all in- and outgroups, represented a special case of "socio-centrism". Those individuals who, in city, province, and country comparisons, gave an ingroup score greater than 20 and an outgroup score less than 10 were therefore removed from the grade seven sample and the correlations re-calculated. The new values appear on the last line of Table 4 as the so-called "normal" grade seven results. There was, of course, no certainty that the individuals removed were "socio-centric". All, however, met Piaget's "cognitive" criterion for Stage III status by understanding that they could belong to a country, and a city in that country, at the same time. Despite the small number of "sociocentric" responses, their removal very much influenced the correlations found.

TABLE 4  
 Dis-attenuated Correlations<sup>†</sup> between In- and Outgroup  
 Ratings of City, Province, and Country Groups

	City	Province	Country
Grade Fours	-0.09 (N=81)		-0.17 (N=81)
Grade Sevens	+0.24** (N=112)	+0.22* (N=115)	+0.16 (N=101)
"Normal" Grade Sevens	+0.36** (N=108)	+0.41** (N=112)	+0.27** (N=98)

\* p<.05

\*\* p<.01

<sup>†</sup> Correlation dis-attenuated in accordance with the formula

$$r_d = \frac{r_{io}}{\sqrt{r_{ai} \times r_{ao}}}$$

where  $r_d$  = dis-attenuated correlation

$r_{io}$  = correlation between observed in- and outgroup scores

$r_{ai}$  = coefficient  $\alpha$  reliability of ingroup scores

$r_{ao}$  = coefficient  $\alpha$  reliability of outgroup scores.

Ordinarily, a reduction in variance brought about by the elimination of data at one end of a range of possible responses would be expected to diminish correlations. In this case, as can be seen in Table 4, they were strengthened. From the scatter diagrams in Figures 1, 2, and 3 (pages 59, 60, and 61) it is obvious why this occurred.

As for the correlations themselves, they were, in most cases, low. The values for the grade sevens were, however, in the positive direction expected from the tendency of Piaget's older subjects to see both in- and outgroups as "much the same". Sumner's prediction of a negative correlation was therefore not born out with this age group. The negative relationship anticipated between the in- and outgroup ratings made by the younger children was supported, albeit rather equivocally.

#### Discussion

Since outgroup disparagement by the older children was appropriately infrequent and the relationship found to exist between their in- and outgroup rating scores more or less as expected, it was only the grade four results which differed from predictions derived from Piaget's analysis of children's attitudes toward groups. When the post-Stage II status of most of the younger children is taken into account, however, their results can be seen to comply rather better with expectations. To begin with, the apparent progress of a number of the younger children towards Stage III renders unlikely the level of outgroup disparagement that was anticipated. That hostile responses toward outgroups were more frequent with the grade fours than with the grade sevens seems, under these circumstances, reasonably consistent with the trend described by Piaget. It is, moreover, conceivable that because the grade four sample was, as a whole, transitional in nature, near-zero correlations between their in- and outgroup

rating scores were inevitable. Thus, while the grade fours neither disparaged outgroups as frequently as anticipated, nor clearly confirmed the predicted negative relationship between their evaluations of in- and outgroups, their responses were probably appropriate for their general position in the reciprocity development process and were certainly sufficient, when taken together with the grade seven findings, to demonstrate expected trends. In general, then, the results for both grades were in fairly good agreement with what was expected on the strength of Piaget's report.

The foregoing was, of course, a prerequisite to the main interest in assessing the significance of Piaget's observations to Sumner's theoretical proposition. The proposition, it will be recalled, involved a symmetric relationship between in- and outgroup attitudes where, under conditions of ingroup attachment, the extreme sentiments -- ingroup idealization and outgroup disparagement -- were expected to co-occur. From the results which have been presented up to now, shortcomings in the proposition should be apparent, particularly insofar as the direction and the symmetry of the relationship between in- and outgroup attitudes is concerned. But in order to determine whether Sumner's predicted three-way connection between ingroup attachment, ingroup idealization, and outgroup disparagement gains support, some measure of the first of these three is required. With the data available, no direct assessment of each individual's ingroup attachment is possible. However, an indirect indication does seem to be provided in terms of the frequency with which subjects chose, as "most" preferred, groups to which they belong by virtue of residence. Table 5 gives these frequencies, in percentage form, for both sample groups.

TABLE 5

Ingroup Attachment Measured Indirectly in Terms of  
 Frequency of Choice of City, Province, or Country  
 of Residence as "Most" Preferred

	Percentage of subjects choosing city of residence as "most" preferred	Percentage of subjects choosing province of residence as "most" preferred	Percentage of subjects choosing country of residence as "most" preferred
Grade Fours	47	-	51
Grade Sevens	58	75	62

If places of residence were of no special importance to the subjects tested, then there would be little reason to expect a high frequency of choice of such places as "most" preferred. But as Table 5 shows, places of residence were chosen, as "most" preferred, in a considerable number of instances. If it can be assumed that this indicates a special attachment to membership groups of this sort, then it might be expected, in accordance with Sumner's proposition, that correspondingly high levels of idealization-disparagement responses would be observed in comparisons between members of these and other entities. But as has already been pointed out (Table 3), this type of response was infrequent in any case, in both of the subject samples. There seems to be an implication, then, that ingroup attachment (in this case, membership group attachment) may exist without idealization-derogation attitudes necessarily accompanying it. Of course, in view of the means by which attachment was taken to be indicated, outright rejection of Sumner's view about the conditions associated with idealization-disparagement attitudes is undoubtedly premature. Nevertheless, there is a suggestion in the present data that this particular idea is not entirely correct.

As for the correlative aspect of the proposition, it is apparent, to begin with, that the relationship between evaluations of in- and outgroups is not a symmetric one since, for both sets of children, instances of ingroup idealization are of much greater frequency than instances of outgroup disparagement (Table 3). This strengthens, at the individual level, the earlier cited view of Campbell and Levine (1961) that "it is far from self-evident that these two must always go together". Furthermore, it is clear from the values in Table 4 that the direction of the correlative relation need not be as predicted by Sumner. At the very least these

values indicate that, with increasing age, the more favourably the ingroup is perceived, the more positive will be the view of the outgroup. Also implicit in this result is support for Rokeach's suggestion that, with "increasing maturity", the correlation between our liking for those who agree with us and our liking for those who disagree with us changes from negative to positive.

On the strength of these findings with children, then, there seems ample reason to doubt the adequacy of the Summerian proposition at the individual level. This, naturally, begs for consideration of its usefulness with older subjects. Experiment II was originally conceived as an extension of the investigation in this direction.



## Experiment II

### Introduction

An implication of Piaget's 1951 paper was that Stage III represented the rudimentary beginnings of an adult outlook on ingroup-outgroup comparisons. It seemed reasonable, therefore, to expect that adolescents, by the Piagetian view, would illustrate a strengthening of the characteristics already observed in older children, and a clearer demarcation between "normals" and "sociocentrics". Experiment II was originally undertaken to determine whether such was indeed the case and, if so, what the further significance to Sumner's proposition was.

Subsequently, however, it came to light that Piaget's theoretical views had, themselves, been extended in this direction. In his more recent writings (Inhelder and Piaget, 1958, pp. 334-350), Piaget has stated that, in adolescence, "the process we have followed through different stages of the child's development is recapitulated on planes of thought and reality new to formal operations...For a second time egocentrism appears...It still takes the form of an initial relative lack of differentiation both between ego's and alter's points of view, between subjective and objective, but this time the lack of differentiation is representational...This egocentrism is one of the most enduring features of adolescence; it persists until the new and later decentering which makes possible the true beginnings of adult work (pp.342-343). While these remarks were made with reference to the cognitive aspects of Piagetian theory, it is obvious that they were also intended to apply to affective modes as well since, shortly thereafter, it is re-emphasized that "affective innovations...are parallel to intellectual transformations" (p.347). Responsibility for this

recapitulation lies, according to Piaget, with the symbolic functioning and capacity for reflective thought which differentiate adolescence from childhood. At the affective level, these allow "feelings about ideals or ideas to be added to the earlier ones" (p.349), thereby causing the process to repeat itself.

In view of these comments, a revision of what had earlier been assumed to be Piaget's position was obviously required. By drawing a parallel with the childhood process, his new position was taken as the view that outgroup disparagement would again become frequent with the beginning of adolescence then, despite a maintained ingroup attachment, drop off with increasing age. Presumably, too, the "tribal outlook" could be expected to be replaced once more by a tendency to see in- and outgroups as "much the same". Despite these changes, however, consequences for Sumner's proposition were still implied. The underlying purpose of Experiment II remained, therefore, unchanged.

#### Method

Subjects. One hundred and ninety-two subjects in all were tested for Experiment II. These included 128 grade ten high school students from two junior high schools and 64 first year students registered in Chemistry, Metallurgy, Biology, and Civil Engineering courses at an institute of technology. The grade ten age range was fourteen to eighteen years, with a modal age of fifteen; the technology students ranged in age from nineteen to twenty-nine, twenty-one years being the mode. The high school sample was approximately evenly split for males and females. About twenty percent of the technology students were female.

The choice of these groups of subjects was, in part, arbitrary. Initially, the prime consideration was to employ subjects sufficiently older

than the grade sevens in order to reduce the chance of Stage III overlap. It turned out, however, that the grade tens so chosen fitted reasonably well with the later-discovered Piagetian analysis, since 13-15 years was mentioned as marking the point at which feelings about ideals and ideas begin to appear. The technology students were chosen specifically because of Piaget's view that "entrance into the occupational world or the beginning of serious professional training" marks the point at which thinking is led "away from the dangers of formalism back into reality" (Inhelder and Piaget, 1958, p. 346).

Means of Testing. Both groups of subjects were tested with the same device. This was a "paper and pencil" test booklet similar to the one used with children, but with the following differences. To begin with, the pre-test designed to detect response biases was omitted. It was felt, by the two high school counsellors consulted, that the high school subjects would not take seriously a questionnaire which began by asking them to name and rate what they liked most or least. To partially compensate for the loss of this control, additional semantic differential scales were included which were neither evaluative in nature nor particularly applicable to groups. These were: hot-cold, smooth-rough, dull-sharp, green-red, strong-weak, hard-soft, big-little, light-heavy, fast-slow. It was hoped that these scales would disrupt, by their novelty, any existing response biases. None of the responses to these scales was included in the scoring.

Also dropped from the booklet was the question asking whether membership in a country, and a city in that country, was concurrently possible. This would have been considered trivial by the subjects, and might have jeopardized the meaningfulness of their other responses.

Finally, the questionnaire was re-worded, where necessary, so as to

make it applicable to older age groups. A sample questionnaire may be found in Appendix B.

Procedure. All subjects were tested in class-room or lecture hall settings. No special introduction accompanied the presentation of the booklets but subjects were specifically asked to complete the booklets one page at a time. Four of the test sessions were carried out by the subjects' regular instructors; three were carried out by the experimenter in the presence of the instructor.

### Results

Losses attributable to misunderstanding or incompleteness amounted to 5 percent of the grade ten sample and 14 percent of the technology student sample. The greater loss with the older subjects is accounted for by the time limitation on their testing session -- virtually all of the questionnaires eliminated from this group were incomplete. There were, of course, no response bias pre-test losses. Thus the data from 122 grade tens and 55 technology students remained for evaluation.

Consistency of attitudes towards ingroups and towards outgroups was assessed in the manner earlier defined for children. This time, 88 percent of the grade tens and 84 percent of the technology students gave responses which indicated some degree of "within individual" consistency. These values could be further broken down, as shown in Table 6. Completely inconsistent responses were given by 12 percent and 16 percent of the younger and older subjects, respectively.

Again, as in Experiment I, it was considered appropriate to utilize only those responses which appeared to reflect a subject's prevailing ingroup-outgroup attitudes in testing Piaget's predictions. Consequently, the responses of the completely inconsistent subjects, as well as the

TABLE 6

Percentages of Subjects Whose Ingroup and Outgroup Ratings  
were Totally, Partially, or Not At All Consistent

	All ingroups, all outgroups consis- tently rated	All groups in one of the categories, two in the other consistently rated	Two groups in each category consistently rated*	Completely inconsistent ratings
Grade tens, N=122	35	45	8	12
Technology Students, N=55	36	30	18	16

\* Includes only those cases where ratings considered to be consistent were all included in two of the three ingroup-outgroup pairs.

inconsistent responses of the otherwise consistent subjects, are eliminated from all subsequent analyses. This means that roughly two-thirds or more of the responses of either group of subjects are included in any one in-group-outgroup pairing. Tables 7 and 8 provide the results of interest derived from these data.

The values in Table 7 relate to the frequency with which ingroup idealization and outgroup disparagement ratings were made by the younger and older subjects. It can be determined from these that 13 percent of the outgroup city, 12 percent of the outgroup province, and 17 percent of the outgroup country ratings given by the grade tens involved disparagement. By comparison to the grade seven findings (Table 3), it is clear that these proportions represent an increase in outgroup disparagement, as might have been expected from Piaget's "recapitulation" statement. Similar comparisons between the grade tens and the technology students show the anticipated decrease. For the latter group, 8 percent of the outgroup city, 3 percent of the outgroup province, and 12 percent of the outgroup country ratings were of a hostile nature. Ingroup idealization was also more prevalent in the grade ten than in the technology student sample. Taken together with the findings for children, a general decrease in ingroup idealization, with increasing age, seems indicated.

In Table 8, the negative correlations between the grade tens' various in- and outgroup ratings correspond with the revival of a "tribal outlook". With the technology students, however, the transposition back to positive correlations was not confirmed. The removal of two technology students classifiable as "sociocentrics" did result in a positive correlation between ratings of in- and outgroup cities but, in view of the probable instability of the small sample, this is tenuous evidence. As with the

TABLE 7

Percentage-wise Categorization of Response Type for  
Each of the Ingroup-Outgroup Pairs

	City Comparison (Grade 10, N=94; Technology Students, N=37)	Province Comparison (Grade 10, N=80; Technology Students, N=39)	Country Comparison (Grade 10, N=83; Technology Students, N=36)
Grade tens	Disparaged Outgroup	Disparaged Outgroup	Disparaged Outgroup
	Did not Disparage Outgroup	Did not Disparage Outgroup	Did not Disparage Outgroup
Technology students	Disparaged Outgroup	Disparaged Outgroup	Disparaged Outgroup
	Did not Disparage Outgroup	Did not Disparage Outgroup	Did not Disparage Outgroup
Grade tens	Idealized Ingroup	Idealized Ingroup	Idealized Ingroup
	Did not Idealize Ingroup	Did not Idealize Ingroup	Did not Idealize Ingroup
Technology students	Idealized Ingroup	Idealized Ingroup	Idealized Ingroup
	Did not Idealize Ingroup	Did not Idealize Ingroup	Did not Idealize Ingroup
Grade tens	6	7	7
Technology students	5	3	5
Grade tens	17	70	7
Technology students	5	87	0
Grade tens	7	5	21
Technology students	3	3	18
Grade tens	10	67	10
Technology students	6	79	6
Grade tens	34	7	34
Technology students	14	6	14
Grade tens	49	7	49
Technology students	74	6	74

children, the correlations were, in general, low but significantly different from zero.

#### Discussion

With the exception of the correlations found to exist between the technology students' ratings of various in- and outgroups, the results of Experiment II appear to correspond quite well with Piaget's "recapitulation" argument. Appropriate fluctuations in levels of outgroup disparagement were demonstrated and the grade tens' correlations did reverse to the direction predicted. As for the failure to obtain positive correlations with the technology students' data, three possible reasons may be suggested:

If it is assumed, to begin with, that the Piagetian view has been interpreted correctly, it is necessary to make the case that the technology students were an inappropriate group with which to illustrate the charge in the direction of the relation between in- and outgroup evaluations that was expected with the revival of "reciprocity and objectivity". This, it turns out, is not difficult, for Piaget maintains that, while "entrance into the occupational world or the beginning of serious professional training...leads thinking away from the dangers of formalism back into reality.... Yet observation shows how laborious and slow this reconciliation of thought and experience can be" (Inhelder and Piaget, 1958, p. 346). This view gains support from the fact that the technology students' levels of outgroup disparagement, though lower than those of the grade tens, were not, generally, as low as the levels observed with the grade sevens. It seems possible, then, that the technology students were too young to demonstrate the positive correlations expected with a return to a reciprocity outlook. Moreover, Piaget's suggestion that "the adol-



TABLE 8  
 Dis-attenuated Correlations<sup>†</sup> between In- and Outgroup  
 Ratings of City, Province, and Country Groups

	City	Province	Country
Grade Tens	-0.26** (N=94)	-0.29** (N=80)	-0.24* (N=83)
Technology Students	-0.25 (N=37)	-0.38* (N=39)	-0.35* (N=36)
Technology Students with "sociocentric" responses removed.	+0.20 (N=35)	no Sociocentric responses present	-0.03 (N=34)

\*  $p < .05$

\*\*  $p < .01$

<sup>†</sup> Correlations dis-attenuated as noted in conjunction with Table 4.

escent manifestation of ego-centrism stems directly from the adoption of adult roles" (p. 343), taken together with arguments (Erikson, 1968, pp. 128-135) that the psychological effects of adult role adoption may extend beyond the teen ages, provides additional grounds for suspecting that the technology students were a premature sample. Unfortunately, however, the absence of data from an older group of subjects makes it impossible to judge the worth of this explanation.

A second possible reason for the absence of positive correlations in the technology students' data derives from a chief difference between this group and the others - that is, its smaller proportion of female subjects. In neither of the two experiments was any attempt made to identify subjects by sex; from the similarity of boys' and girls' responses in Piaget's early report, there seemed no need. It was, however, possible to later classify 40 of the grade sevens by sex. Table 9 provides the averages of the ratings given by 20 grade seven boys and 20 grade seven girls to the various in- and outgroups. These indicate, in terms of the difference between the average ratings for any ingroup-outgroup pair, that in- and outgroups are seen to be somewhat more similar by females than by males. An additional aspect of Experiment II, to be reported in greater detail later, provides further support for this suggestion. Briefly, eight grade ten subjects who pointedly distinguished between in- and outgroups with their ratings were chosen to be contrasted with eight who tended to give both kinds of groups similar ratings. Six of the first eight turned out to be males, seven of the second eight were females. The implication of these two sets of findings seems to be that, for some reason, a tendency to see in- and outgroups as "much the same" is more pronounced in females than in males. It seems possible, there-

TABLE 9

Averages of the Ratings Given to the Various In- and Outgroups by  
 20 Grade Seven Boys and 20 Grade Seven Girls (possible range of  
 Ratings: 5 to 25; the Higher the Score, the More Favourable the  
 Ratings)

	City		Province		Country	
	Ingroup	Outgroup	Ingroup	Outgroup	Ingroup	Outgroup
Grade Seven Girls (N=20)	19.8	15.7	19.6	15.3	19.7	14.1
Grade Seven Boys (N=20)	20.7	14.4	20.9	16.1	20.7	13.4

fore, that the 4 to 1 ratio of males to females in the technology student sample may have helped to account for the absence of the positive correlations that were expected to reflect this tendency.

Finally, it is possible that the findings with technology students derive from a change in features of the reciprocity development process itself. Piaget, with adolescents and with children, has emphasized the part which "real life" experiences play in reciprocity development. Such experiences, obviously more extensive with increasing age, are as likely to point out the shortcomings of ingroups as the previously unrecognized virtues of outgroups. Seeing groups as "much the same" might therefore involve, in adults, seeing both as neither bad nor good, neither right nor wrong, and so on, or, in other words, seeing both in an evaluatively neutral fashion. Conceivably, such a trend would result in a distribution of the responses of the "normals" around neutral scores and a distribution of the responses of the "sociocentrics" around idealization-disparagement kinds of scores. As a consequence, correlations computed with the combined responses of "normals" and "sociocentrics" might likely be negative.

Some support for this latter explanation is found in the scale response profiles for the "normal" technology students and the "normal" grade sevens, which are shown in Figures 4, 5, and 6 (see pages 62, 63, and 64). (Both groups of subjects were expected to demonstrate a reciprocity outlook.) As can be seen, there does appear to be a tendency, with increasing age, for ingroup scale ratings to shift toward neutral evaluations. On the other hand, though outgroup ratings at either age level are generally near the neutral value, an accompanying shift downward in the technology students' evaluations of outgroups also occurs. This, and the fact that a negative correlation between in- and outgroup province ratings was obtained in the absence of sociocentric responses (Table 8), cast doubt

on the ability of this explanation to fully account for the correlation results.

It is obvious that, with all of the reasons suggested above, more information than is available is required to determine their sufficiency in accounting for the lack of positive correlations in the technology students' data. In these circumstances, it is probably safest to acknowledge that all could be significant to a greater or lesser degree. Thus it may be that the process of attaining a reciprocity outlook extends beyond adolescence and well into adulthood, that females develop this outlook sooner than males, and that the outlook itself involves perceiving both in- and outgroups in an unbiased fashion. Whatever the case, these must be subjects for further experimentation. Insofar as the present data are concerned there seems to be a reasonable indication that, through childhood and into adolescence at least, a fairly predictable sequence of ingroup-outgroup attitude changes occurs.

Having conceded this, it is appropriate to consider the significance of the overall findings of Experiment II to the Sumnerian point of view about ingroup-outgroup attitudes. As before, it is simplest to begin with Sumner's contention that loyalty or attachment to the ingroup is a condition accompanying attitudes of ingroup idealization and outgroup disparagement. Some indication of ingroup attachment is again required and, in Experiment II, this was obtained in two ways. The first resembled the indirect method used with the children and involved determining the frequency with which the city, province, and country of residence were chosen as "most" preferred. Table 10 shows that the majority of subjects in both samples made choices of this sort, implying as before, widespread attachment to these groups. From Table 7 it is apparent, however, that the high levels of idealization-disparagement responses which might have been expected --

TABLE 10

Ingroup Attachment Measured Indirectly in Terms of the Frequency of Choice of City, Province, or Country of Present Residence as "Most" Preferred.

	Percentage of subjects choosing city of present residence as "most" preferred.	Percentage of subjects choosing province of present residence as "most" preferred.	Percentage of subjects choosing country of present residence as "most" preferred.
Grade tens	52	77	62
Technology Students	63	85	76

from a Summerian standpoint -- to reflect this attachment, did not occur. Indeed, the most frequent occurrence of this kind of response was only 10 percent (in this case, in the grade tens' in- and outgroup country ratings).

The second, and more direct, assessment of group attachment and its influence on ingroup-outgroup attitudes was made as follows. The semantic differential responses given by the grade ten subjects from one school were scanned, and, on the basis of their group ratings, eight subjects who pointedly distinguished between in- and outgroups and eight who saw little or no difference between in- and outgroups were selected. These subjects were interviewed, ostensibly about their future occupational plans, and in the course of the interview were asked where they would most prefer to "settle down". Since, on the questionnaire, all but one of the subjects in each of these sub-samples had chosen, as "most" preferred, at least two of the three residence groups, it was of interest whether any special attachment to the city, province, or country of residence was voiced in the interview situation. As it turned out, of the eight subjects who rated in- and outgroups in a like fashion, six made statements that were interpreted as indicating this attachment. Of the eight whose in- and outgroup ratings differed sharply, four manifested attachment in their responses. Samples of these are provided in Appendix C.

Taken together, the two sets of findings above strengthen the previous indication in the children's results that attachment to a group may exist without idealization-disparagement attitudes being a necessary accompaniment. They also provide support for the earlier cited opinion (see page 5) of Merton that "Summer too soon and without warrant concluded that deep allegiance to one group generates antipathy toward other groups". As

regards the other aspects of Summer's proposition, however, interpretation of the Experiment II results is made difficult by the inconclusive nature of the technology students' semantic differential ratings. For example, the negative correlations between the in- and outgroup ratings given by both sample groups were certainly in the direction required by the proposition. But at the same time, there was at least some reason to suspect that Piaget's predicted re-development of reciprocity attitudes was incomplete. Thus, with older subjects than were tested, it seems possible that positive correlations might, again, be realized. In this connection, Rokeach's (1960) finding, with northern and southern college student subjects, that the greater their acceptance of whites, the greater their acceptance of Negroes, seems significant. Unfortunately, Rokeach did not report the ages of his subjects, but since they were drawn from the populations of four year educational institutions, rather than from a two year one as in the present case, it is certainly possible that they were older than the subjects tested here.

Similarly, no satisfactory conclusion can be drawn with regard to the proposed symmetry between the favourableness of ingroup and the unfavourableness of outgroup attitudes. The suggested movement, in Figures 4, 5, and 6, of the "normal" responses toward neutral evaluations could ultimately result, with a group comprised of "normals" and "sociocentrics", in such a relationship. On the other hand, the evidence supporting the actual existence of this trend is, itself, tenuous. Again, therefore, one returns to the need for additional testing with an older, and supposedly more "developed" (in the reciprocity sense), group.

Yet despite these shortcomings, the results of Experiment II are not



without significance to the Sumnerian point of view. In combination with the findings with children, they indicate that an individual's attitudes toward in- and outgroups will, more than likely, undergo a series of changes. Whether or not these changes derive, as Piaget claims, from decentering experiences, it is clear that they may strongly affect the extent to which the symmetric and correlative aspects of Sumner's proposition adequately describe ethnocentric phenomena. In view of the fact that potential limitations in the applicability of this major statement about ethnocentrism have not, generally, been acknowledged, this in itself is useful information.

## Conclusions and Implications for Related Interests

It has been the aim of the present investigation to determine whether predictions which were derived from certain theoretical and experimental observations made by Piaget, and which appeared to be incompatible with a major proposition of ethnocentrism theory, are empirically supported. The proposition was interpreted here as calling for a symmetric correlative relationship between in- and outgroup evaluations such that the more positive the first, the more negative the second, and such that, when ingroup attachment is high, it is the extreme sentiments - ingroup idealization and outgroup disparagement - which occur. The specific aspect of Piaget's work from which the incompatible predictions were derived is his concept of reciprocity development as seen in children's attitudes toward groups. According to Piaget, the child's point of view depends upon his position in the normal developmental process of moving from an egocentric outlook to an awareness and understanding of others. This process, moreover, is "recapitulated" with the beginning of adolescence. Thus, young children and adolescents are expected to view outgroups in a highly critical manner while, at the end of childhood and with entrance into adulthood, outgroups are supposed to be perceived more objectively. It is particularly in regard to this latter occurrence that conflicts between Piaget's views and those of Sumner, to whom the above proposition may be attributed, appear to arise. In the first place, outgroup disparagement by older children and young adults is expected by Piaget to become infrequent despite a maintained attachment to the ingroup. In the second, a beginning tendency in these two age groups to see in- and outgroups as "much the same" implies a correlative relationship between in- and outgroup evaluations which is opposite to that predicted by Sumner's prop-

osition.

In testing out the implications of Piaget's work, it was considered a necessary pre-requisite to obtain evaluations for several ingroup-outgroup combinations, particularly since his reciprocity concept appeared to be based entirely on responses given by children to questions about own and other countries. That these evaluations were, in fact, consistent with Piaget's observations is most clearly seen in Figures 7 and 8, which summarize the findings (see pages 69 and 70). Figure 7 shows the levels of outgroup disparagement (defined as outgroup rating scores falling in the bottom fifth of the possible score range) found in subject groups whose modal ages were as indicated. The rises and falls in these are in accordance with fluctuations described or predicted by Piaget. In Figure 8, the averages of the scores assigned the various kinds of groups are plotted against the modal ages. The differences between the average in- and outgroup ratings of the 12 and 21 year old groups, smaller by comparison to those of the other two age groups, can be interpreted as reflecting a beginning tendency to see in- and outgroups as more or less the same. These findings are, of course, based on data obtained through cross-sectional testing and must therefore be viewed with appropriate caution.

As regards the specific issues on which the Piagetian and Sumnerian positions appear to differ, it must be admitted that the present investigation does not provide a completely satisfactory resolution of these. This is because, while the correlative relation between the ratings given by the older children to in- and outgroups was in the direction suggested by Piaget's work and opposite to that predicted by Sumner, such was not the case for the data obtained from the young adults. Possible reasons for the

failure to obtain positive correlations between the oldest subjects' ratings of in- and outgroups were discussed, but no decision as to the adequacy of these could be made without further testing. Either the continuation, in adulthood, of the negative relationship observed, or a later return to a positive relationship seemed, from the information available, equally possible. On the other hand, there definitely appeared to be grounds for rejecting Sumner's contention that attachment to the ingroup accompanies the point of view in which ingroups are idealized and outgroups disparaged. Ingroup attachment, as indirectly measured by the frequency of choice of city, province, and country membership groups as "most" preferred, was high in all four subject samples, but was not accompanied by correspondingly high levels of idealization-disparagement responses. Moreover, when some of the grade ten subjects were later interviewed, it was found that ingroup attachment was expressed both by subjects seeing little difference between in- and outgroups (in terms of their questionnaire responses) and by subjects seeing extensive differences between the two. On this issue, then, the results were clearly incompatible with the Sumnerian view, and supported instead the indication given by Piaget's subjects that ingroup attachment could exist without outgroup disparagement.

Such were the findings as they related to the specific purposes of the investigation. There are, however, additional implications. At the outset of this report, a brief quotation from The Authoritarian Personality outlined important questions with which the psychological study of group relations is involved. It seems appropriate to close by considering aspects of the present results which are meaningful to these questions.

The first question, it may be recalled, was What kinds of general attitudes do individuals have about their own and other groups? Since most

of the subjects tested rated ingroups more positively than outgroups, it can be stated with little reservation that, generally, an individual will have more favourable attitudes toward ingroups than toward outgroups. While this may appear to simply confirm the findings of a large number of other studies that a tendency to perceive the ingroup more positively than the outgroup is widespread, there is a deeper significance in the present results. To begin with, it would seem that ethnocentric sentiments are early appearing, perhaps even before an understanding of what is meant by the groups -- liked or disliked -- is attained. In addition, though there may be certain developmental influences on these sentiments, the tendency to see ingroups more positively than outgroups seems likely to persist with age. One may ponder the origin of this common outlook. Allport has stated that "erroneous generalization and hostility are natural and common capacities of the human mind" (1954[1958, p. 17]) and that people "easily exaggerate the difference between groups and readily misunderstand the grounds for it" (p. 18). According to Allport "This propensity lies in [man's] normal and natural tendency to form generalizations, concepts, categories whose content represents an oversimplification of his world of experience" (p.26). These, of course, are arguments based on aspects of cognition. Another view, which also suggests the "naturalness" of ingroup preference, but which has been derived somewhat differently, has recently been advanced by Campbell (1965): living in groups, according to Campbell, has had immense survival value for man. As a consequence, ingroup preference has evolved as a "natural sociocultural phenomenon". By either of these arguments, the tendency to make ethnocentric distinctions between in- and outgroups should be both general, and early appearing.

Another question raised by the authors of The Authoritarian Personality was What underlying ideas or themes run through an individual's thinking about groups and group relations? As to identifying any specific ideas or themes, the present data are only sufficient to suggest, as mentioned above, that whatever these are they will likely involve seeing the ingroup more favourably than the outgroup. At the same time, the actual existence of underlying themes is supported by the "within individual" consistency in group ratings that was found in most of the older and younger subjects.

How do these ideas develop? The implication in the findings of Experiments I and II - based, admittedly, on cross-sectional data - is that development does not simply involve the maintenance of a point of view which has been inculcated in childhood. More likely, an individual's attitudes toward groups will instead undergo the kinds of fluctuating change illustrated in Figures 7 and 8. These changes argue against Sumner's view that ethnocentric, and other, attitudes develop by "tradition, imitation and authority" (1906[1960, p.18]) for, if such were the case, one would expect these attitudes to be stable, or to undergo only those changes which strengthened them. Figure 8 shows that, with outgroups at least, this is not so. On the other hand, since the fluctuations correspond fairly well with expectations from a Piagetian perspective, it seems reasonable to consider "decentration" experiences as playing an important part in the development of ideas about groups and group relations.

The present results do not, of course, prove this latter contention. More to this point would be observations which showed that interaction with persons from different groups and with different beliefs generally led to a greater awareness of, and a change in attitude toward, these persons. In this regard, an investigation by Druckman (1968) may be mentioned. Using naval recruits as subjects, Druckman formed teams for an inter-national

simulation game in order to test various hypotheses relating to ethnocentrism. Each team, or nation, consisted of four players: a head of government, a foreign minister, a defense minister, and an aspiring head of government. It was the foreign minister's job to attend "international organization meetings", make "international" contacts, and so on. After participation in the game, all subjects rated their own nation, allies, and enemies on semantic differential scales. According to Druckman, the foreign ministers generally gave the least ethnocentric ratings. Similar kinds of results have been observed with "contact" attempts at reducing prejudice, although these also suggest that confounding factors, such as the relative status of the individuals brought into contact, may influence the extent to which attitudes are changed (see Allport, 1954, Chapter 16, for a review). In any case, there seems reason to believe that an individual's attitudes toward groups do not simply develop in accordance with the type of parental discipline imposed (as implied by Adorno et al, 1950) or by assimilation of social norms (as implied by Sherif and Sherif, 1953) but reflect, as well, the individual's own experiences in interaction with others. This latter point, though hardly an original one, nevertheless needs more experimental attention.

As regards the question What personality trends, if any, are an individual's ideas about groups related to?, the present investigation does little more than provide an indication of its relevance. This is seen in the grade seven scatter plots (Figures 1, 2, and 3) where the two general kinds of attitudes predicted by Piaget - "reciprocity" and "sociocentric" - appear to be demonstrated. The connection between these responses and the interest expressed in the question above derives from Piaget's opinion that a "sociocentric" outlook develops out of an atmosphere of constraint and

authority: these, of course, are conditions which Adorno et al (1950) have shown to give rise to personality differences.

Finally, the results of the present investigation seem to be of some significance to the question How are an individual's ideas about groups related to membership in class, church, political party, and so on? As was reported in Experiment I, no significant differences in group evaluations given by children from lower and higher socioeconomic backgrounds were observed. Nor were any found when a similar comparison, using the grade tens' data, was carried out (Hotelling's  $T^2$  test,  $p < .20$ ). Other studies have suggested differences, especially as in Frenkel-Brunswick's (1954) report of a "relatively high percentage of ethnocentric families among the workers...". Unfortunately, however, she did not specify what this percentage was or, indeed, if it was high in an absolute, as well as in a "relative" manner. If it can be assumed that ethnocentrism, for Frenkel-Brunswick, was characterized by ingroup idealization-outgroup hostility sentiments, then it is probable that the percentage was not high in the absolute sense. For the lower socio-economic status objects tested here, responses of this sort came from about 9 percent of the grade fours, 2 percent of the grade sevens, and 9 percent of the grade tens. In other words, though it may be that the idealization-rejection syndrome has been more frequently encountered in the lower than in the higher socio-economic levels, its occurrence is probably not so frequent as to warrant predictions of overall differences in ethnocentrism between socio-economic levels.

There was, however, a suggestion in Experiments I and II that another kind of "membership" influences attitudes toward groups. This was seen in the apparent tendency for females to be less vigorous than males in distinguishing between in- and outgroups. Allport (1954[1958, pp. 338-



340]) has pointed out that, in identifying with the father, a boy will often "confuse sheer aggression with masculinity" and, as a result, "talk tough, criticize loudly, and berate outgroups". Furthermore, according to Allport, "This pattern of sham ferocity may in time turn into genuine hostility". The data that have been collected here are obviously insufficient for an evaluation of this point. They do, however, suggest directions for future inquiry.

It is true, of course, that the immediately preceding remark holds for most of the other points that have been raised here. No single investigation can ever hope to provide more than a small fraction of the information required for an understanding of why individuals are inclined toward competition, or conflict, or harmonious interaction. It is hoped that a contribution in this direction has been made by the findings presented above.

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**Figures**

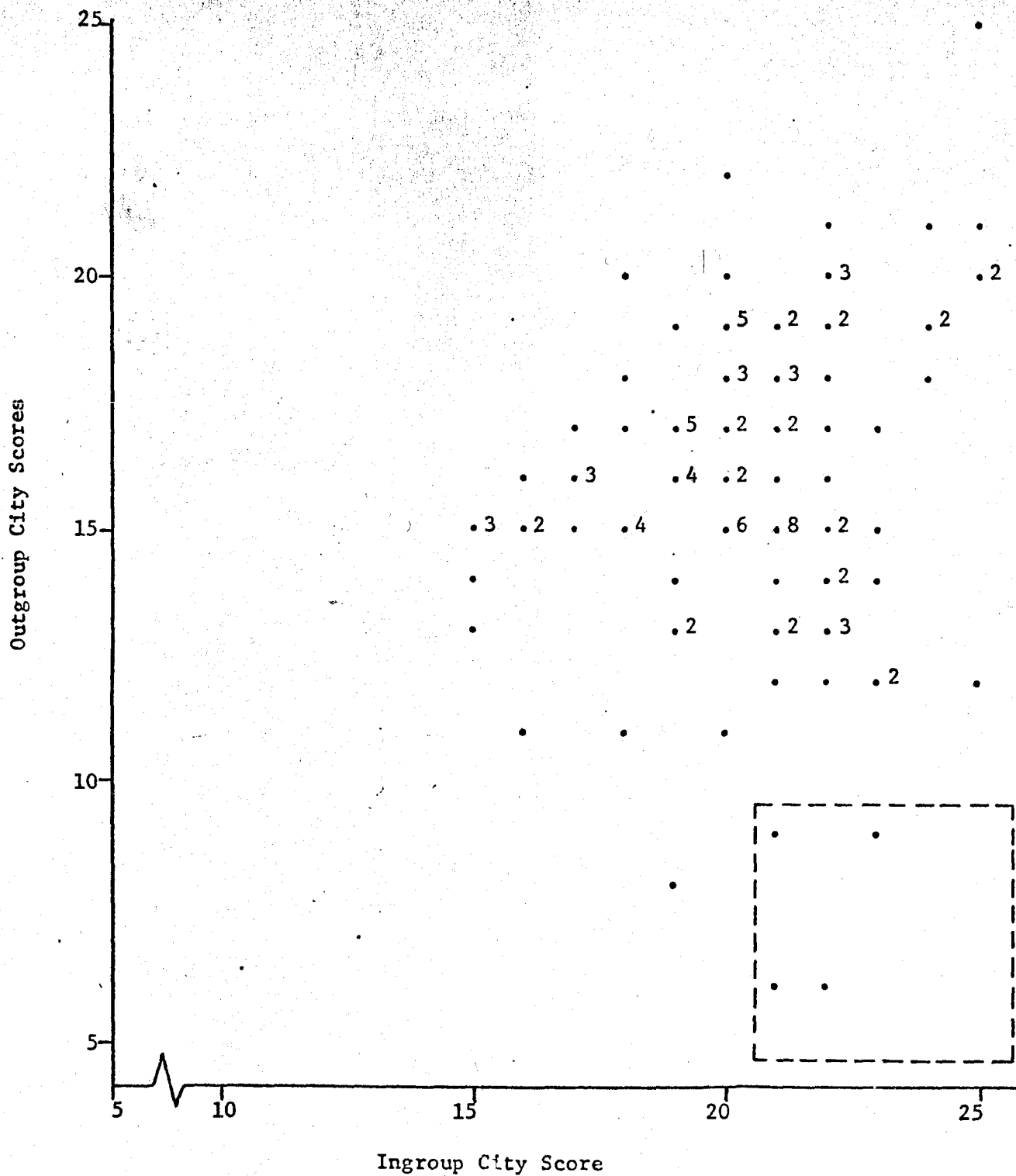


Fig. 1. Scatter Diagram of grade seven rating scores for city ingroup-outgroup pair. Broken square in lower right corner encloses "sociocentric" scores; N=112. (Numbers adjacent to dots represent the number of subjects with these particular scores.)

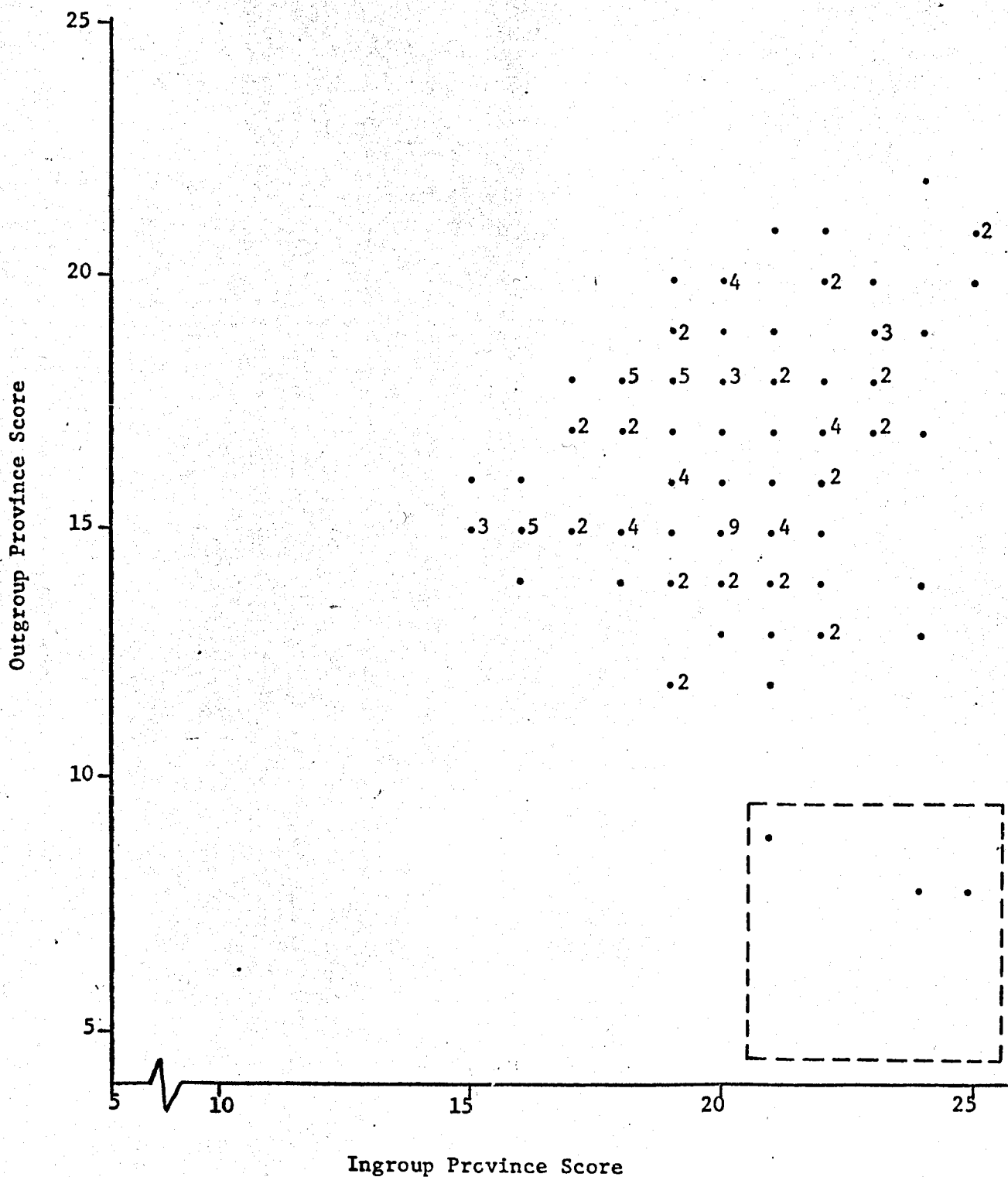


Fig. 2. Scatter diagram of grade seven rating scores for province ingroup-outgroup pair. Broken square in lower right encloses "sociocentric" scores; N=115. (Numbers adjacent to dots represent the number of subjects with these particular scores.)

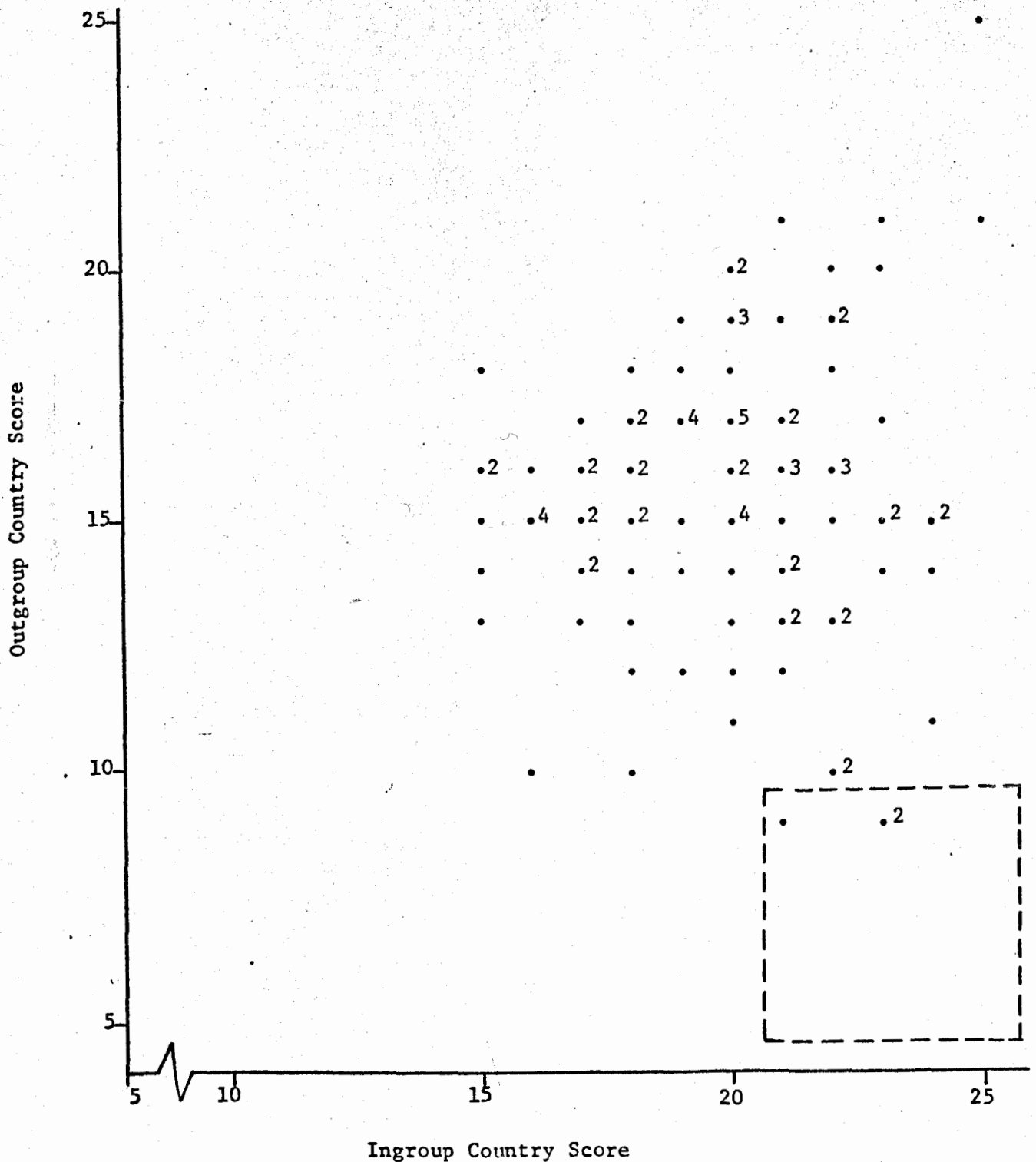


Fig. 3. Scatter diagram for grade seven rating scores for country ingroup-outgroup pair. Broken square in lower right corner encloses "sociocentric" scores; N=101. (Numbers adjacent to dots represent the number of subjects with these particular scores.)

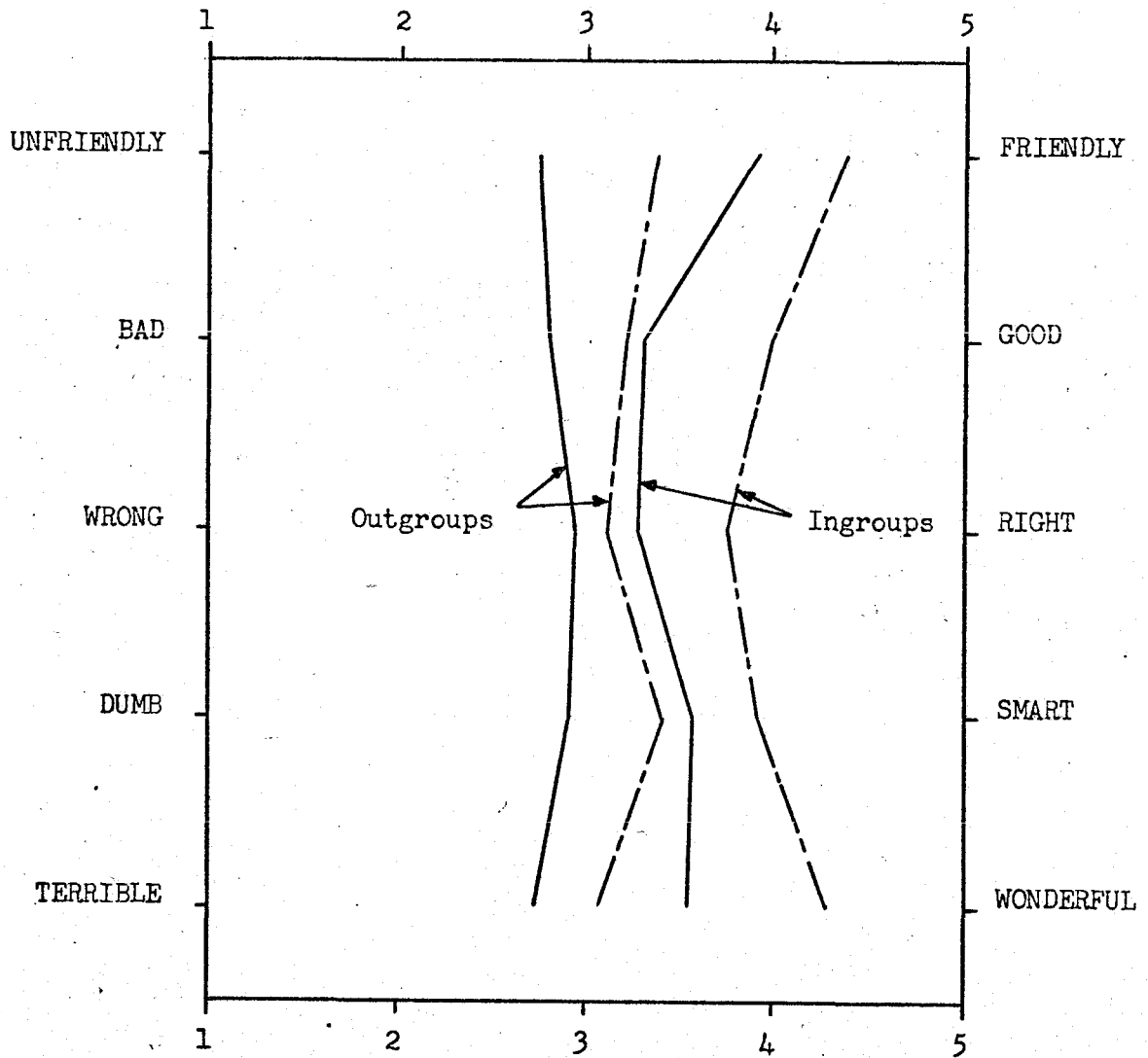


Fig. 4. City groups response profile for "normal" grade sevens (broken lines) and "normal" technology students (unbroken lines).



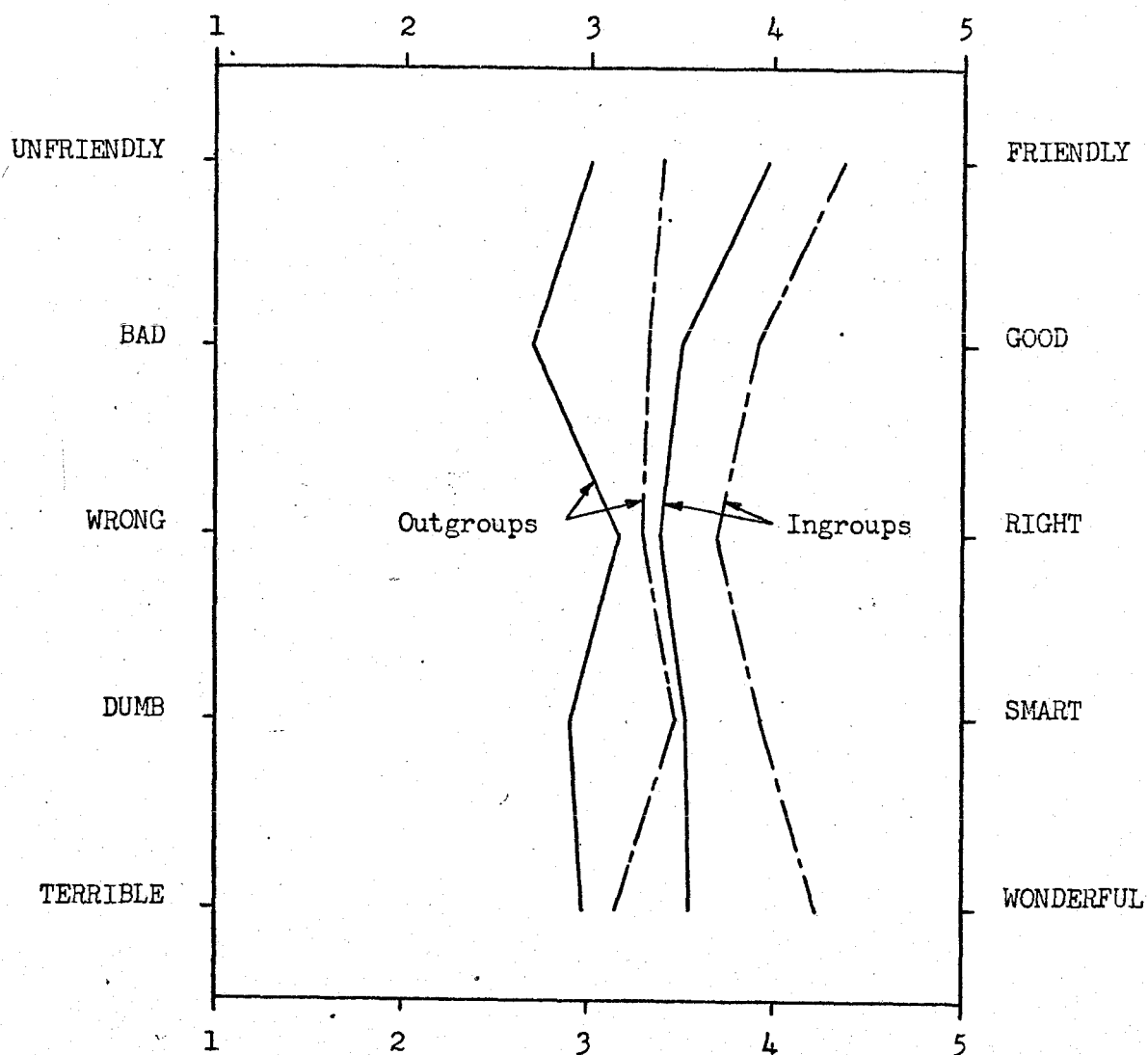


Fig. 5. Province groups response profile for "normal" grade sevens (broken lines) and "normal" technology students (unbroken lines).

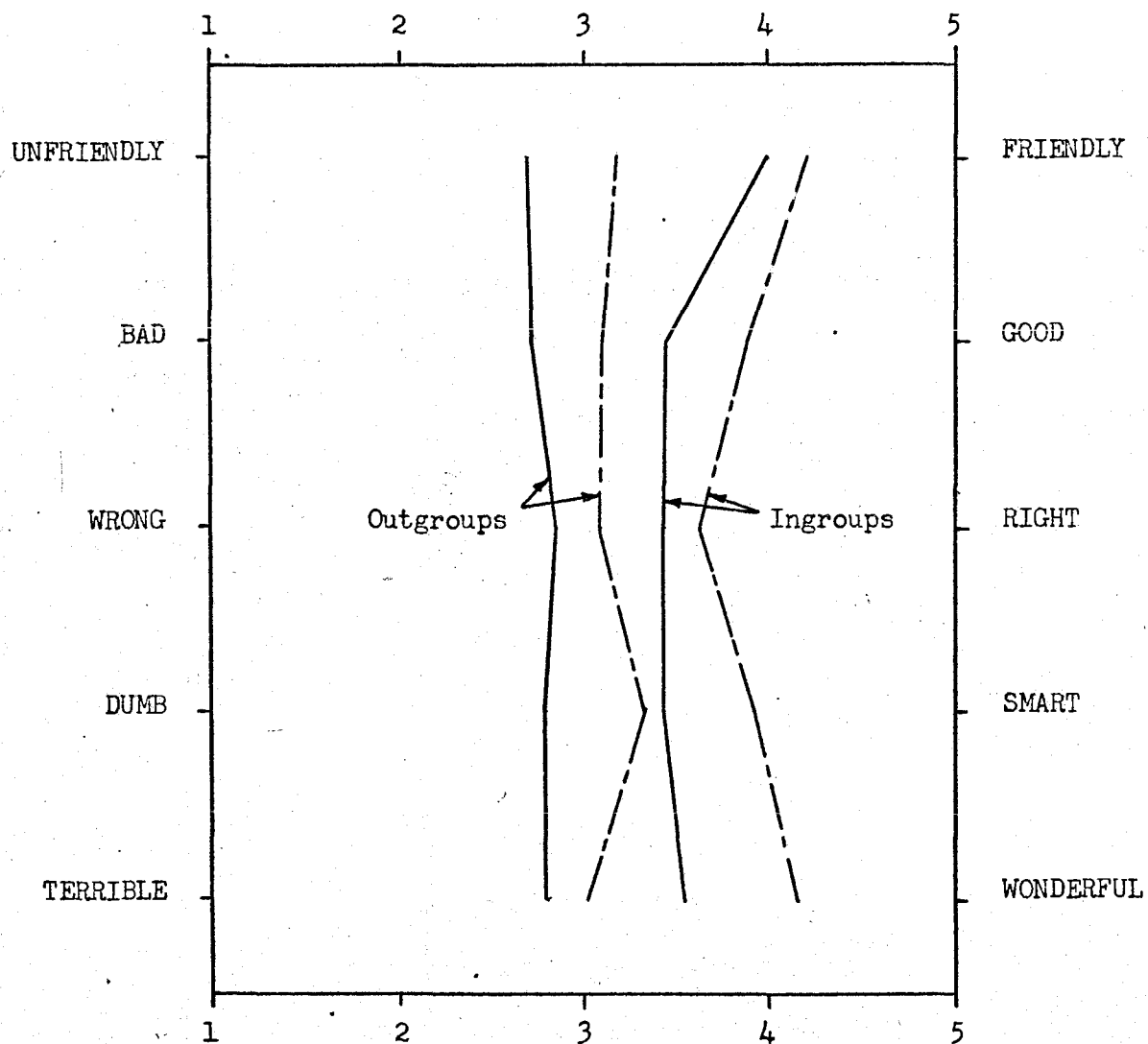


Fig. 6. Country groups response profile for "normal" grade sevens (broken lines) and "normal" technology students (unbroken lines).

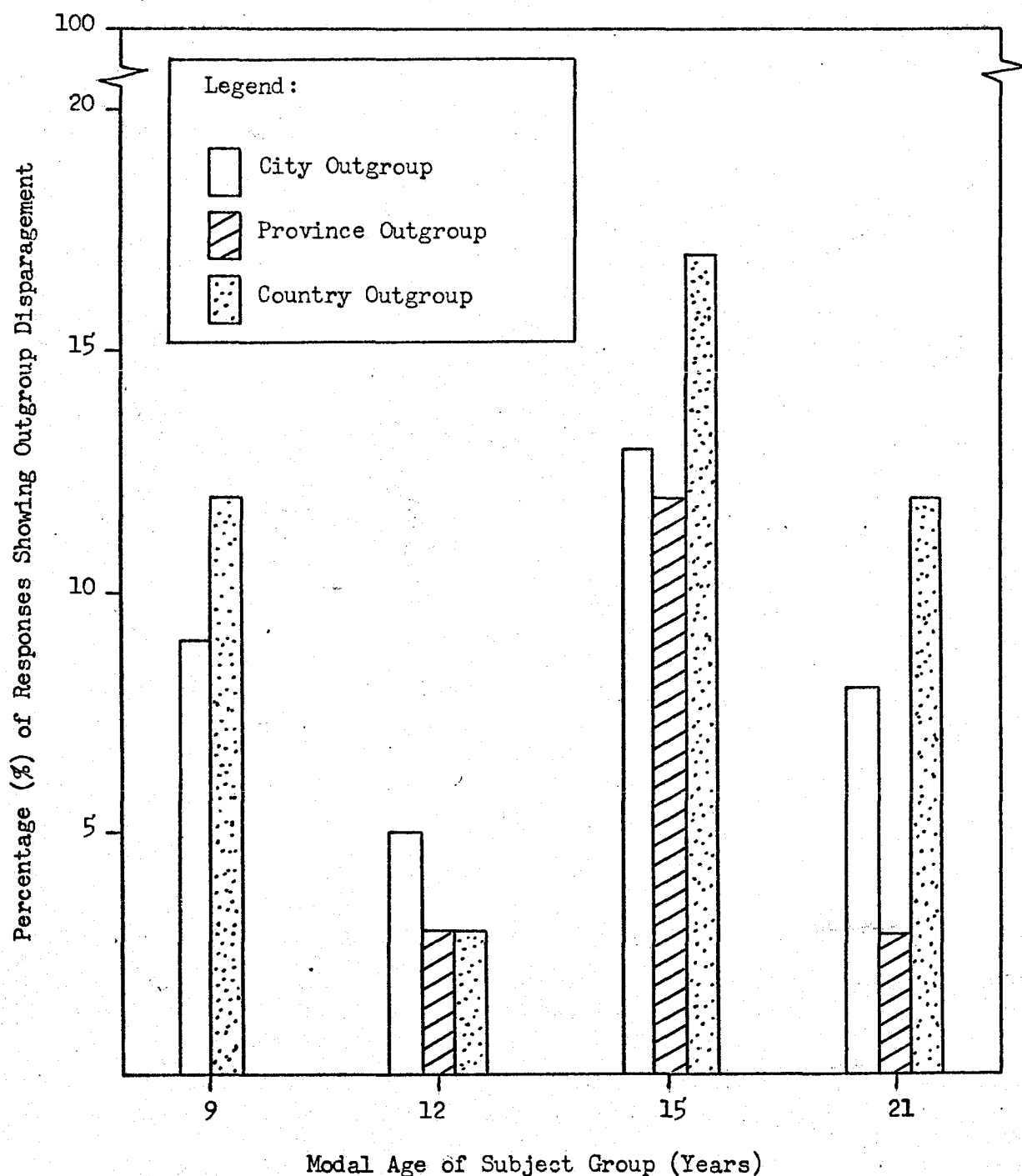


Fig. 7. Percentage of outgroup disparagement responses for the four groups of subjects tested. Subject groups are identified by modal age. Outgroup disparagement was defined as any outgroup rating in the bottom fifth of the possible range of scores. Only consistent responses are employed.

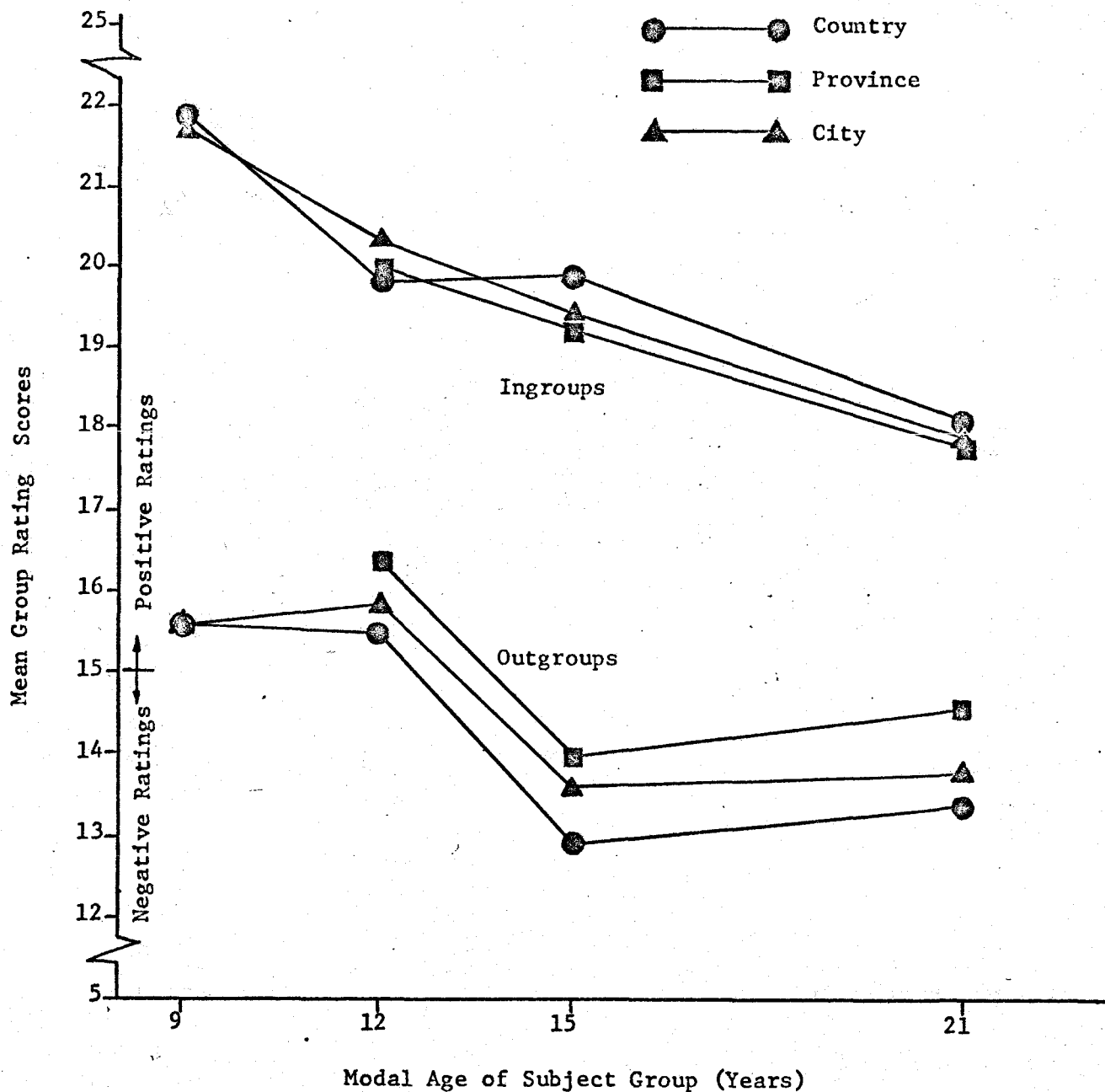


Fig. 8. Mean ratings assigned the various in- and outgroups as a function of modal age of the subjects tested. Only consistent ratings are employed, and "sociocentric" ratings are included in the 12 and 21 year old groups.

Appendix A

Note on Methodology

In general terms, the measurement of ethnocentrism may be conceptualized as attitude assessment, where the attitude objects are sets of people who constitute psychological entities for the individual (Adorno et al, 1950, p.146), which he differentiates as in- or outgroups in accordance with whether he associates or dissociates himself with them (Merton, 1949, pp.295-299). Such attitudes are distinguishable from specific prejudices in that they apply, in a generalized fashion, to in-group-outgroup comparisons and, thereby, form a relatively consistent pattern despite shifts in context (Allport, 1954 [1958, p.34]; Adorno et al, 1950, p.102). These points, originating in the literature, are basic considerations in the development, and use, of a means of measuring ethnocentrism. Additionally, however, provision should be made for:

1. the detection of unreliable measurements, such as those involving response biases,
2. the exclusion of inappropriate measurements, such as those involving straightforward assessments of objective characteristics (e.g., rich, poor),
3. the applicability of the measurement device to both children and adults.

Clearly, a number of approaches exist with the potential to fulfill these requirements. One of the more convenient makes use of the semantic differential.

A substantial amount of work -- which need not be reviewed here -- has confirmed the usefulness of the semantic differential as a means of attitude assessment. Pertinent to the present interest is the feature that the same set of scales can generally be used to measure attitudes toward diverse attitude objects (Osgood, Suci, and Tannenbaum, 1957, p.195). In addition, Di Vesta's extensive investigations (1965, 1966)

on the use of the differential with children have established its utility with younger subjects, and provided an adjective pool for use with certain age levels. These qualifications, and others, warranted the consideration of the semantic differential as an attitude scale for the present purposes. What follows, therefore, is a brief step-by-step description of how the scale was constructed.

Step 1. It was first necessary to choose bi-polar pairs of adjectives which were meaningful, to both children and older subjects, for describing members of groups. These were readily obtained by scanning Di Vesta's (1965) atlas of adjectives. Choice was based on the adjectives' evaluative nature (in terms of the usual factors of meaning identified by the semantic differential), frequency of usage, similarity to modes of qualification used by Piaget, and utility with adults. The following were chosen: pretty-ugly, wrong-right, clean-dirty, bad-good, friendly-unfriendly, smart-dumb, wonderful-terrible. Of these, pretty-ugly and clean-dirty were subsequently eliminated because of a tendency, noticed in an early pilot study, for children to regard them as straightforward, objective kinds of qualifiers. Though this left only five scales, it represented a substantial broadening of the standards of comparison used by Piaget.

Step 2. The next requirement was for appropriate concepts about which attitudes could be expressed. An initial decision was to restrict these to well-defined social units to ensure comparability and the younger subjects' familiarity with them. It also seemed desirable to include territorial groups to provide a linkage with Piaget's work. A first attempt, therefore, specified five provinces and five countries for rating. Later, this was changed to allow for a certain amount of choice by the subject:

each individual was required to compose (for no specified purpose) lists of five cities, five provinces, and five countries and, from each of these, to choose the place in which he would "most" prefer to live and the place in which he would "least" prefer to live. Three pairs of subject-specified in- and outgroups were thereby obtained which, moreover, provided a useful dividend: the frequency of choice, as "most" preferred, of a city, province, or country of residence gave an indirect measure of attachment to these.

Step 3. As an important part of analysis was to involve the use of coefficients of correlation between in- and outgroup ratings, it was essential that the possibility of spurious correlations due to response biases be lessened. It was felt that sources of response bias might include temporary disposition at the time of testing, and a tendency to make responses in a socially desirable way. In order to provide some measure of detection of these, a pre-test was devised which required the subject to use the constructed semantic differential scales to evaluate anything "liked very much" and anything "disliked very much". Where the liked object was rated negatively, or the disliked object positively, the responses were to be interpreted as indicating a negative or positive disposition in the subject to all objects, whether liked or disliked. Where both liked and disliked objects were given identical neutral ratings, the responses were to be interpreted as being made in accordance with the point of view that it is socially desirable to refrain from distinguishing between liked and disliked objects. In either case, the subsequent responses in the group comparisons were to be eliminated from consideration.

Step 4. In organizing the items above into a useable unit, two teachers,



familiar with children of the age to be tested, were consulted. The formats resulting from this collaboration were virtually identical to the formats of the sample questionnaires provided in Appendix B. They will not, therefore, be reproduced here. From these samples, it will also be seen that province comparisons were not solicited from the younger subjects. Not only were six sets of ratings too time consuming for the younger children, but in addition, provinces, as social units, seemed to be unknown to many of them.

Step 5. A few early studies, carried out to check on minor points, led eventually to a full scale pilot study. The questionnaire booklets were presented to 68 grade four and 72 grade seven school children in a classroom setting. The dynamics of the pilot study were more or less those detailed in "Procedure" for Experiment I. The findings of interest are described in point fashion below:

1. The questionnaire seemed understandable to most of the children tested; 88 percent of the grade fours and 80 percent of the grade sevens were able to carry out all of the required tasks. Most of the rejects of the latter group resulted from insufficient time being allowed for completion.
2. Neither the grade sevens, nor most of the grade fours encountered much difficulty in naming five groups to each list. Some of the younger children did, however, have trouble completing the lists and, occasionally, entities other than countries were named as countries.
3. Eliminations attributable to the response bias pretest were 13 percent for the grade fours and 6 percent for the grade sevens. All were for positive ratings of "disliked" objects. Therefore, some indication of the effectiveness of the pretest might be expected to be seen in the ratings

given later to groups. Below, in Table 11, are the averages of the ratings of the various in- and outgroups given by both the rejected and the retained grade fours and sevens. (The possible range of scores was 25 to 5, with 25 being the positive extreme and 5 the negative extreme.) It is apparent, from the values in Table 11, that the rejected grade fours

TABLE 11

Averages of Ratings of the Various In- and Outgroups Given by the Rejected and Retained Grade Fours and Grade Sevens in Pilot Study

Sample

	City Ingroup	City Outgroup	Province Ingroup	Province Outgroup	Country Ingroup	Country Outgroup
Grade fours rejected by pretest, N=9	20.9	18.9			22.0	18.3
Grade fours retained after pre- test, N=51	21.1	14.6			21.4	14.0
Grade sevens rejected by pretest, N=4	20.0	16.3	22.5	15.0	19.8	12.5
Grade sevens retained after pre- test, N=54	19.6	15.4	20.2	16.2	19.9	15.4

did tend to see outgroups rather more positively than did the retained grade fours. No clear trend is detectable with the rejected grade sevens; more than likely the sample size of four rejected subjects was too small to adequately reflect a difference. It is also, of course, possible that the

ratings given by the rejected grade sevens were affected by a positive disposition and were simply more positive than they might normally have been. In any case, the usefulness of the pretest seemed adequately demonstrated by the grade four results, so it was decided to include it in all further testing. ✓

4. Tables 12 and 13 are matrices which show the ranges found for the correlations between the scores on each of the five bi-polar scales employed in the differential. For the grade fours, four values of each

TABLE 12  
Range of Correlations Between Semantic Differential  
Scale Scores in the Grade Four Pilot Study

	Friendly- Unfriendly	Bad- Good	Wrong- Right	Smart- Dumb	Wonderful- Terrible
Friendly- Unfriendly					
Bad-Good	0.38-0.75				
Wrong-Right	0.17-0.66	0.51-0.73			
Smart-Dumb	0.11-0.47	0.44-0.61	0.45-0.56		
Wonderful- Terrible	0.32-0.78	0.47-0.65	0.46-0.57	0.29-0.66	

correlation were obtainable (since four groups were rated), while for the grade sevens there were six. The moderate-to-high positive correlations were commensurate with the scales' common loading on the evaluative factor of the semantic differential. At the same time, the correlations were low enough to suggest that a reasonably broad base of evaluation was being tapped. ✓

TABLE 13

Range of Correlations Between Semantic Differential  
Scale Scores in the Grade Seven Pilot Study

	Friendly- Unfriendly	Bad- Good	Wrong- Right	Smart- Dumb	Wonderful- Terrible
Friendly- Unfriendly					
Bad-Good	0.28-0.62				
Wrong-Right	0.17-0.70	0.29-0.73			
Smart-Dumb	0.23-0.47	0.18-0.51	0.27-0.64		
Wonderful- Terrible	0.47-0.67	0.31-0.66	0.06-0.56	0.31-0.47	

Step 6. Indications of the validity of the test were sought and included the following:

1. For the pilot study reported above, mean ratings given in the pretest for "liked" and "disliked" objects were: grade fours, 21.1 and 8.6; grade sevens, 21.8 and 8.6. Since the range of possible responses was from 25 (the positive extreme) to 5 (the negative extreme), the bi-polar scales appeared to differentiate, in an appropriate fashion (i.e., by extent and direction), attitude objects chosen individually as "liked" or "disliked" very much.
2. An early study, in which 34 grade sevens rated experimenter-specified in- and outgroups using a differential in which only 3 of the 5 scales were the same, provided essentially the same results as were obtained with the pilot study grade sevens who chose and rated their own in- and outgroups. In the former, the mean ratings of "British Columbia" and

"Canada" were 20.3 and 21.3 while the corresponding outgroups averaged, overall, 18.0 and 17.3; in the latter, the mean ingroup ratings for province and country comparisons were 20.2 and 19.9, and for the corresponding outgroups 16.2 and 15.4. There seemed, therefore, to be a convergence in the findings from these two relatively independent approaches.

3. The distinguishing feature of ethnocentrism is that ingroups are perceived somewhat more sympathetically than outgroups. Fully 91 percent of the pilot study grade sevens and 98 percent of the pilot study grade fours exhibited, by their responses, a tendency to rate ingroups more positively than outgroups. It seemed justified, by these findings, to conclude that ethnocentric values were in some sense being reflected in the questionnaire responses.

4. During the testing for Experiment I, 26 percent of the grade fours and 33 percent of the grade sevens, in addition to rating chosen in- and outgroups on the semantic differential scales, indicated "the way I feel about the people who live" in the place being rated by checking the appropriate "face" of a depicted man whose visage ranged, in five steps, from happy to angry. The correlations between the differential and the "faces" ratings of groups varied from 0.49 to 0.52 for the grade fours, and from 0.23 to 0.72 for the grade sevens. Again, then, a convergence of findings with two different methods of approach was indicated.

Step 7. Two methods of assessing reliability were employed, both with subjects from Experiment I. The first was by test-retest, in which 19 of the grade fours and 24 of the grade sevens again completed the questionnaire booklet about five weeks after the first testing session. Reliabilities were as shown in Table 14. In relation to the test-retest

TABLE 14

Test-retest Reliabilities for Subsamples of the Experiment I Subjects

	City Ingroup	City Outgroup	Province Ingroup	Province Outgroup	Country Ingroup	Country Outgroup
Grade fours, N=19	0.27	0.29			0.22	0.46*
Grade sevens, N=24	0.43*	0.81**	0.96**	0.77**	0.89**	0.56**

\* $p < .05$ \*\* $p < .01$ 

reliabilities usually found in this area of investigation, the grade seven values seemed generally acceptable. The grade four values, on the other hand, were very low. It did, however, seem possible to account for these by the fact that, on retest, very few of the initial in- and outgroups were again chosen to be rated. In other words, the grade four subsample ratings, on the two occasions, involved, in most cases, expressions of attitudes toward different groups. Under these circumstances, testing and retesting was probably an inadequate means of assessing reliability. *yo*

This being the case, another assessment of reliability was desirable. Since the scores assigned the groups were actually composites of scores on five semantic differential scales, it was possible to obtain these estimates through the calculation of "coefficient  $\alpha$ ". (See Lord and Novick, 1968, pp. 87-95, for a discussion of coefficient  $\alpha$  and the reliability of composite measurements.) The values so obtained -- which, of course, are lower bounds on reliability -- are listed in Table 15. Again, by the usual standards, these rather more stable reliabilities were acceptably high. They were subsequently used to dis-attenuate correlations between the ratings of various in- and outgroups (see note in conjunction with Table 4).

TABLE 15

Coefficient  $\alpha$  Reliabilities Based on Data From the Experiment I Subjects

	City Ingroup	City Outgroup	Province Ingroup	Province Outgroup	Country Ingroup	Country Outgroup
Grade fours, N=134	0.73	0.86			0.74	0.88
Grade sevens, N=151	0.76	0.80	0.76	0.74	0.76	0.75

It was concluded, on the strength of the findings outlined in Steps 1 to 7 above, that the questionnaire provided meaningful and reasonably accurate information about children's attitudes toward various groups.

## Appendix B

Samples of questionnaires used with the grade four subjects, the grade seven subjects, and the grade ten and technology student subjects. (Since in- and outgroups were rated with identical sets of semantic differential scales, each of the sample questionnaires has been abridged so as to include only one of these sets. Eliminated, therefore, from the grade four booklet are the pages on which "most" and "least" preferred country and "least" preferred city were rated. These pages have also been removed in each of the other two sample booklets, as well as the pages on which "most" and "least" preferred provinces were rated.)



Grade four questionnaire

AGE \_\_\_\_\_

This is a book of questions to find out about you and about some of the things you know. On the next pages, words are put together in pairs to help you describe different things. The first pair will be "FRIENDLY" and "UNFRIENDLY" and will be printed on the page like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

If you are describing something that you think is fairly UNFRIENDLY, then you would mark the proper box on the first line like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

If, instead, you think the thing you are describing is somewhere in between being FRIENDLY and UNFRIENDLY, then you would mark the proper box on the first line like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

The other word pairs to help you describe different things will be "BAD and GOOD", "WRONG and RIGHT", "SMART and DUMB", and "WONDERFUL and TERRIBLE". Use all the lines on each page by marking the box on each line that fits the thing you are describing. Work quickly but carefully.

Begin by thinking of something you like very much. Put its name in the blank here: \_\_\_\_\_ . Now use the word pairs below to describe it.

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

BAD  very  fairly  in between  fairly  very GOOD

WRONG  very  fairly  in between  fairly  very RIGHT

SMART  very  fairly  in between  fairly  very DUMB

WONDERFUL  very  fairly  in between  fairly  very TERRIBLE

Now think of something you dislike very much. Put its name in the blank space here: \_\_\_\_\_ . Use the word pairs below to describe it.

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

BAD  very  fairly  in between  fairly  very GOOD

WRONG  very  fairly  in between  fairly  very RIGHT

SMART  very  fairly  in between  fairly  very DUMB

WONDERFUL  very  fairly  in between  fairly  very TERRIBLE

Before describing any more things, see if you can name five cities. If you cannot name five, just name as many as you can by writing their names below:

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

Next, can you name five countries? Don't worry if you cannot name five. Just name as many as you can below:

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

Now look at the list you made of the cities. In which city would you like to live most of all? Write its name here: \_\_\_\_\_.

In which of the cities you named would you like to live least of all? Write its name here: \_\_\_\_\_.

From your list of countries, choose the country in which you would most of all like to live. Write its name here: \_\_\_\_\_.

Now choose the country in which you would least of all like to live, and write its name here: \_\_\_\_\_.

On this page, write in the blank the name of the CITY you chose  
as the one in which you would most like to live: \_\_\_\_\_.

Describe the people who live there by marking the proper box on each line.

FRIENDLY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNFRIENDLY
	very	fairly	in between	fairly	very	

BAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GOOD
	very	fairly	in between	fairly	very	

WRONG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RIGHT
	very	fairly	in between	fairly	very	

SMART	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DUMB
	very	fairly	in between	fairly	very	

WONDERFUL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TERRIBLE
	very	fairly	in between	fairly	very	

On this page, write in the blanks the name of the city and country where you were born:

CITY \_\_\_\_\_ COUNTRY \_\_\_\_\_

Can you belong to the country in which you were born and the city in which you were born at the same time, or can you belong to only one or the other at a time? Mark the box below which shows your answer:

can belong to both  
at the same time

can only belong to  
one at a time

Grade seven questionnaire



AGE \_\_\_\_\_

This is a book of questions to find out about you and about some of the things you know. On the next pages, words are put together in pairs to help you describe different things. The first pair will be "FRIENDLY" and "UNFRIENDLY" and will be printed on the page like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

If you are describing something that you think is fairly UNFRIENDLY, then you would mark the proper box on the first line like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

If, instead, you think the thing you are describing is somewhere in between being FRIENDLY and UNFRIENDLY, then you would mark the proper box on the first line like this:

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

The other word pairs to help you describe different things will be "BAD and GOOD", "WRONG and RIGHT", "SMART and DUMB", and "WONDERFUL and TERRIBLE". Use all the lines on each page by marking the box on each line that fits the thing you are describing. Work quickly but carefully.

Begin by thinking of something you like very much. Put its name in the blank here: \_\_\_\_\_ . Now use the word pairs below to describe it.

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

BAD  very  fairly  in between  fairly  very GOOD

WRONG  very  fairly  in between  fairly  very RIGHT

SMART  very  fairly  in between  fairly  very DUMB

WONDERFUL  very  fairly  in between  fairly  very TERRIBLE

Now think of something you dislike very much. Put its name in the blank space here: \_\_\_\_\_ . Use the word pairs below to describe it.

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

BAD  very  fairly  in between  fairly  very GOOD

WRONG  very  fairly  in between  fairly  very RIGHT

SMART  very  fairly  in between  fairly  very DUMB

WONDERFUL  very  fairly  in between  fairly  very TERRIBLE

Before describing any more things, see if you can name five cities.  
If you cannot name five, just name as many as you can by writing their  
names below:

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

Next, can you name five provinces? Don't worry if you cannot name five.  
Just name as many as you can below:

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

Finally, can you name five countries? Once again, if you cannot name five,  
then just write as many as you can below:

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

Now look at the list you made of the cities. In which one would you like to live most of all? Write its name here: \_\_\_\_\_.

In which of the cities you named would you like to live least of all? Write its name here: \_\_\_\_\_.

From your list of provinces, write here the name of the province in which you would most of all like to live: \_\_\_\_\_.

Write in the following blank space the name of the province in which you would least of all like to live: \_\_\_\_\_.

From your list of countries, write here the name of the country in which you would most of all like to live: \_\_\_\_\_.

Write in the following blank space the name of the country in which you would least of all like to live: \_\_\_\_\_.

On this page, write in the blank the name of the CITY you chose  
as the one in which you would most like to live: \_\_\_\_\_.

Describe the people who live there by marking the proper box on each line.

FRIENDLY  very  fairly  in between  fairly  very UNFRIENDLY

BAD  very  fairly  in between  fairly  very GOOD

WRONG  very  fairly  in between  fairly  very RIGHT

SMART  very  fairly  in between  fairly  very DUMB

WONDERFUL  very  fairly  in between  fairly  very TERRIBLE

On this page, write in the blanks the name of the city and country where you were born:

CITY \_\_\_\_\_ COUNTRY \_\_\_\_\_

Can you belong to the country in which you were born and the city in which you were born at the same time, or can you belong to only one or the other at a time? Mark the box below which shows your answer:

can belong to both  
at the same time

can only belong to  
one at a time

Grade ten and technology  
student questionnaire



~~AGE~~ \_\_\_\_\_

The following questionnaire is a new way to survey attitudes: your help is needed in testing its efficiency for future research.

To begin with, use the following blanks to name five cities, five provinces, and five countries. Just list them as they come into your mind, without any concern for ordering them in any particular way.

*(the provinces and cities can come from any country)*

CITIES \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROVINCES \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

COUNTRIES \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

From your lists, choose the city in which you would most prefer to live and the city in which you would least prefer to live:

most: \_\_\_\_\_

least: \_\_\_\_\_

Do the same for the provinces:

most: \_\_\_\_\_

least: \_\_\_\_\_

And for the countries:

most: \_\_\_\_\_

least: \_\_\_\_\_

On the following pages, you are to rate each of the above using sets of paired words such as:

FRIENDLY    very    fairly    in between    fairly    very    UNFRIENDLY

Say, for instance, you are rating the city in which you would most prefer to live, and you think that the people of this city are fairly friendly.

Then you would mark the proper blank as shown:

FRIENDLY    very     fairly    in between    fairly    very    UNFRIENDLY

Using this method, check in every paired word set the one blank which you think gives the best description. Some of the word pairs may not seem appropriate at first, but if you use your imagination you will be able to check a blank in all pairs. Please complete each page.

On this page, describe the inhabitants of the CITY you chose as the  
 one in which you would most of all like to live: <sup>Province</sup> <sub>Country</sub>  
 least

FRIENDLY	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	UNFRIENDLY
STRONG	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	WEAK
HOT	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	COLD
SMOOTH	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	ROUGH
DULL	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	SHARP
RIGHT	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	WRONG
GREEN	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	RED
BAD	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	GOOD
DUMB	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	SMART
WONDERFUL	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	TERRIBLE
BIG	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	LITTLE
HARD	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	SOFT
LIGHT	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	HEAVY
FAST	<u>very</u>	<u>fairly</u>	<u>in between</u>	<u>fairly</u>	<u>very</u>	SLOW

### Appendix C

Examples of responses from the grade ten interviews which were interpreted as showing membership group attachment or lack of membership group attachment.

1. Responses interpreted as showing attachment to a membership group:

How would you feel about permanently settling down in another country? No, I want to live here...like, right here. In Vancouver? Yes, or in British Columbia somewhere...(Kathy).

Would you prefer to work in B.C.? I guess so...well, I'm a British Columbian...(Bob).

2. Responses interpreted as showing lack of attachment to membership groups:

Would you prefer to live and work in Vancouver or British Columbia? I don't want to work around here...I've lived here all my life...I want to see other places...(Sandra).

Where do you think you might like to work? I thought about going to the States...Australia...What about other parts of Canada? Not really, no. Would you prefer to live and work around here? I'd rather live here than anywhere else in Canada, but I'd kind of like to live in the States and work there...(Don).