

## **Polarization of judgment and preference for judgmental labels\***

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### *Abstract*

*Studied how value connotations of the response language affect the relationship between judges' attitudes and polarization of judgment. Subjects (military conscripts, n = 105) rated 28 statements concerning drug use on 2 types of rating scales. Results indicate that subjects show more polarization on rating scales where their own evaluation of the statement is congruent with the value connotations of the scale labels. In a second experiment 82 subjects (male and female university students) were asked to rank adjectives in order of their suitability to characterize attitude statements. Results imply that value connotations also mediate the relationship between judges' attitude and preference for verbal labels in attributing adjectives to attitude statements. Subsequent analysis suggests that this preference for adjectives that are evaluatively congruent with own attitude, persists even when the adjectives are less correct from a descriptive point of view.*

### **INTRODUCTION**

When judges are required to rate attitude statements according to Thurstone's method of equal-appearing intervals, these ratings are markedly influenced by judges' own attitudes on the issue in question. For instance, when the issue is that of attitudes towards Negroes, the most extreme or polarized ratings tend to be given by the most pro-Negro judges, and the least polarized ratings by the most anti-Negro judges (Selltitz, Edrich and Cook, 1965; Upshaw, 1965; Zavalloni and Cook, 1965). Since Sherif and Hovland's (1961) 'assimilation-contrast' model fails to account for the observed differences in attitude scale values as a function of judges' own position on the attitude continuum (*cf.* Eiser and Stroebe, 1972), a major approach to the explanation of this relationship is formed by 'accentuation theory'

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(Eiser, 1971a, 1971b). This model conceives of differences in polarization as a function of:

- (a) the judges' own evaluation of the statements, i.e. judges' own position on the attitude continuum;
- (b) the implicit value connotations of the terms by which the judgment scale is labelled.

Thus judges tend to give more *polarized ratings* of a given set of statements on scales where their own position is closer to the end of the scale denoted by a term with relatively positive value connotations, than on scales where their own position is closer to the end of the scale denoted by a term with negative value connotations. This influence of response scale manipulations upon the relationship between polarization and judges' attitudes has been clearly demonstrated in two studies in which teenagers rated statements concerned with the issue of adult authority over children (Eiser and Mower White, 1974, 1975) and in a study in which students rated statements concerning drug-use (Eiser, 1973).

The extremity of judgments an individual makes along a given construct may be taken as an index of the personal relevance or salience of that construct to the individual. Tajfel and Wilkes (1964) conducted an experiment in which the priority and frequency of mention was used as an index of the salience of attributes. Subjects were first required to give a free description of other people, relative priority and frequency of the mentioned attributes being recorded. Results of this study clearly indicated that the degree of polarization increased when subjects were required to rate objects on rating scales based on salient attributes elicited from their own free descriptions. This approach does not, however, provide an answer to the question of why one particular attribute or dimension is more salient than another. It is suggested that individuals tend to see as most salient those dimensions that are most consistent with a positive self-evaluation. There is however no *direct* evidence that subjects prefer to use those labels that are consistent with a positive evaluation of themselves; such preference is only inferred from extremity of judgment. The present studies were conducted to test whether the interaction of judges' attitudes with the value connotations of the response language determine *both* the degree of polarization and linguistic preferences, directly measured.

In the first experiment a similar procedure was adopted to that used by Eiser (1973), in order to test the effects of the evaluative aspects of the rating scales on subjects' judgments. Hypothesis 1 predicted that the degree of polarization should be higher when judges' own evaluations are congruent with the value connotations of the scale labels, than when these value connotations are incongruent with judges' own evaluations.

A second experiment was conducted to test whether the value connotations in interaction with judges' attitude also determine the relative salience of labels. Using preference as an index of salience, it was predicted that subjects, in describing attitude statements, should prefer to use those labels that are evaluatively congruent with their own position on the attitude continuum. Hypothesis 2 therefore predicted that judges with a favourable attitude should choose more adjectives with a positive value connotation in describing pro-drug statements than subjects with a less favourable attitude towards drugs and drug-use, while the latter should prefer to use adjectives with a positive value connotation in describing anti-drug statements.

## PILOT STUDY

**Method**

A set of 34 statements was presented to a group of 56 introductory psychology students. Subjects rated each statement on an 11-point unfavourable-favourable scale as to how favourable the item was with respect to drugs and drug use. A scale value was calculated for each item, defined as the mean rating of each item on the unfavourable-favourable scale. The final 28 items were selected on the basis of the scale value and the standard deviation associated with each. These items covered a wide range of attitudes and were distributed more or less symmetrically over the attitude continuum.

Second, subjects were asked to rate each of 20 scale terms on a 7-point scale ranging from 'agree very much' to 'disagree very much'. Subjects were told to think of the kind of opinion to which they would apply each term and then to rate how much they would agree with that opinion. This measure is similar to the one used by Anderson (1968), and taken as an index of the evaluative connotations of each term. Six scales were then selected on the basis of the obtained means and standard deviations of these scores. On 3 scales (*moral-immoral*, *mature-immature* and *strong-willed-weak-willed*) the presumably more 'pro-drug' terms (from a descriptive point of view) carried more negative value connotations than their opposites. On the remaining 3 scales (*broadminded-narrow-minded*, *progressive-conservative* and *tolerant-intolerant*), the more 'pro-drug' terms carried more positive value connotations than their opposites.

## EXPERIMENT 1

**Method**

This experiment was designed to replicate the Eiser (1973) study and test the hypothesis that the degree of polarization is inversely related to the distance between subjects' own position on the attitude continuum and the end of the scale marked by a term with positive value connotations.

*Subjects*

Subjects were 105 military conscripts, a further 26 subjects who returned incomplete questionnaires or did not show up at the second part of the experiment were excluded from the analyses. Subjects were seated at separate desks and no more than 25 were tested at any one time.

*Assessment of attitude scores*

In the first part of the experiment subjects indicated their agreement or disagreement with each of the selected 28 Thurstone-like items on a 5-point scale ranging from 'strongly agree' to 'strongly disagree'. Each subject's attitude score was obtained by computing the mean scale value of all items endorsed. These scores correlated significantly with scores obtained with Guilford's (1954) self-rating procedure ( $r = 0.68, p < 0.001$ ).

### Procedure

One week after the pretest attitude assessment, subjects were required to rate the same 28 items in terms of three 7-point scales. In condition 1 ( $n = 49$ ) subjects rated the statements on the scales *broad-minded–narrow-minded*, *progressive–conservative* and *tolerant–intolerant*. In condition 2 ( $n = 56$ ) subjects rated the items on the scales *immoral–moral*, *weak-willed–strong-willed* and *immature–mature*.

### Results

As a measure of polarization, the absolute difference of each rating from the middle category of the 7-point scale was calculated and summed over the 28 items. The data were cast in a correlational design for each condition, with the attitude score as an independent variable and the total polarization score (summed over the 3 scales) as a dependent variable. It was predicted that in condition 1, where subjects rated the items on the scales *broadminded–narrow-minded*, *progressive–conservative* and *tolerant–intolerant*, there would be a direct relationship between the favourability of own attitude and the amount of polarization, i.e. the more favourable the attitude towards drugs the higher the polarization score. This prediction was confirmed but not very reliably ( $r = -0.26, p < 0.07$ ). In condition 2, where subjects rated the items on the remaining three scales, an inverse relationship between favourability of attitude and the amount of polarization was predicted and clearly confirmed ( $r = 0.43, p < 0.001$ ). In order to make a more direct comparison with the Eiser studies, subjects were divided into two attitude groups by a median split. Overall polarization scores and polarization scores for each rating scale were computed, and differences between the two attitude groups were tested with one-way analyses of variance (see Table 1). As can be seen from this table, polarization scores were higher for the 'pro-drug' subjects in condition 1, while in condition 2 the 'anti-drug' subjects showed a higher polarization score on all three scales.

Table 1. Mean polarization scores for pro-drug (I) and anti-drug (II) subjects on each scale

Scale	Attitude group		F
	I	II	
Scale group 1	( $n = 24$ )	( $n = 25$ )	
progressive–conservative	43.6	38.4	1.74
broadminded–narrow-minded	46.3	37.0	7.25 <sup>c</sup>
tolerant–intolerant	46.0	39.5	2.59
total of scale group 1	135.9	114.9	4.13 <sup>b</sup>
Scale group 2	( $n = 28$ )	( $n = 28$ )	
strong-willed–weak-willed	42.9	50.0	3.59 <sup>a</sup>
mature–immature	39.6	50.4	10.03 <sup>d</sup>
moral–immoral	34.8	46.6	9.74 <sup>d</sup>
total of scale group 2	117.3	147.0	8.11 <sup>c</sup>

Possible range of polarization scores is from 0 to 84.

For F-values in scale group 1,  $df = 1/47$ .

For F-values in scale group 2,  $df = 1/54$ .

<sup>a</sup> $p < 0.07$ , <sup>b</sup> $p < 0.05$ , <sup>c</sup> $p < 0.01$ , <sup>d</sup> $p < 0.005$ .

## EXPERIMENT 2

**Method***Subjects*

Subjects were 82 male and female students of the University of Utrecht, a further 2 subjects who returned incomplete questionnaires were excluded from the analyses. Subjects were seated at separate desks and no more than 12 were tested at any one time.

*Procedure*

Subjects' attitudes were assessed in the same way as in experiment 1. The attitude scores obtained with Thurstone's equal-appearing intervals correlated significantly with subjects' self-ratings of their position on the attitude continuum ( $r = 0.67$ ,  $p < 0.001$ ). One week after the initial attitude measurement, subjects were required to fill in a questionnaire containing statements expressing varying degrees of favourability towards the use of drugs.

In condition 1 ( $n = 41$ ) subjects received a questionnaire with 16 'anti-drug' statements, while in condition 2 ( $n = 41$ ) subjects were presented with 15 'pro-drug' statements. Beneath each statement was printed, in a single random order, a column of 12 adjectives, identical to those that formed the six rating scales in experiment 1. Subjects were required to select five adjectives that were in their opinion best suited to describe the attitude expressed by each statement. They were then asked to rank these five adjectives; the most suitable adjective receiving a rank of one through to the least suitable receiving a rank of five.

**Results**

On the basis of the results of the pilot study the adjectives were split into two groups; one set of adjectives with a positive value connotation (*broadminded, tolerant, progressive, moral, mature and strong-willed*), and a set of adjectives with a negative value connotation (*immoral, narrow-minded, intolerant, conservative, immature and weak-willed*). Without taking the rank values into account, it was predicted that subjects with a more favourable attitude would use more adjectives with a negative value connotation to describe 'anti-drug' statements than subjects with a less favourable attitude. The second prediction was that subjects with a less favourable attitude would use more adjectives with a negative value connotation to describe 'pro-drug' statements than subjects with a more favourable attitude. This resulted in 2 correlational designs, with the attitude score being the independent variable and the counts of negative adjectives being the dependent variable. The number of positive adjectives in each case is the complement of the number of selected negative adjectives; it is clear therefore that the predictions concerning the use of positive adjectives are in the opposite direction. Results indicate that subjects have a greater preference for negative adjectives in describing 'pro-drug' statements the more unfavourable their attitude ( $r = 0.51$ ,  $p < 0.0005$ ), and that the more favourable their attitude the greater preference they show for negative adjectives in describing 'anti-drug' statements ( $r = -0.67$ ,  $p < 0.0001$ ).

Table 2. Sum of the selective positive (A) and negative (B) weighted adjectives for each level of agreement

Level of agreement	A	B	N <sup>a</sup>
Strongly agree	13.8	1.2	178
Agree	12.1	2.9	270
Don't know	6.6	8.4	140
Disagree	2.0	13.0	254
Strongly disagree	0.3	14.7	256

<sup>a</sup>This table is based upon 41 (subjects)  $\times$  27 (statements) = 1107 cases.

Thirteen of the 'pro-drug' statements and 14 of the 'anti-drug' statements used in the adjective ranking task were identical to the statements used in the attitude assessment. This enabled us to relate subjects' preference for the different labels in describing each attitude statement to their actual level of agreement with each statement. Subsequent analyses were performed over these 27 statements, with level of agreement as an independent variable, ignoring which statement the agreement score pertained to. Furthermore, subjects' scores were weighted depending upon the ranks attributed to the five selected adjectives. A rank of one resulted in a score of five, through to a score of one for the adjective that was ranked as the fifth best to describe each statement. In Table 2, the weighted sum of the selected positive and negative adjectives is shown for each agreement level. These results indicate that preference for positive and negative labels is very strongly related to actual agreement level. In the extreme agreement levels (strongly agree, strongly disagree) nearly all of the selected adjectives have the same sign as subjects' attitude towards the opinion expressed in the statement. As noted before, the predictions concerning polarization in experiment 1 were based upon the assumption that six of the adjectives were more pro-drug from a descriptive point of view, while the remaining six were more anti-drug. The results in Table 2, however, suggest that subjects tend to neglect descriptive properties of the adjectives if they strongly agree or disagree with the actual statement. These scores imply, for instance, that subjects who strongly agree with a statement expressing an anti-drug position are prepared to describe it with positive labels like *tolerant*, *broadminded* and *progressive* even though these more normally denote a pro-drug position.

## DISCUSSION

Results of the first experiment confirm the hypothesis that value connotations of the scale terms affect the relationship between judges' attitudes and polarization of judgment. Although subjects were presented judgment scales that were *either* congruent *or* incongruent with their own attitude, the results are similar to those found by Eiser (1973) and Eiser and Mower White (1974, 1975), where *both* types of scales were presented to all subjects.

The results of experiment 2 imply that value connotations also mediate the relationship between judges' attitude and the preference for verbal labels in

attributing adjectives to attitude statements. These results are in accordance with the 'congruity' principle (Osgood and Tannenbaum, 1955) that people prefer to describe items they agree with in terms of adjectives with positive value connotations and items they disagree with in terms of adjectives with negative value connotations. Taken together, therefore, the results of the two experiments provide direct evidence for the assumed relationship between judgmental extremity and preference for language labels.

Subsequent analyses suggest that this preference even persists when the labels are less correct from a descriptive point of view. These results are related to research concerning evaluative versus descriptive aspects of trait inferences. Peabody (1967) asked subjects to rate trait terms on scales with one scale term that was descriptively similar to the presented trait but evaluatively the opposite, and one scale term that was evaluatively similar but descriptively the opposite (e.g. rate 'cautious' on the scale *bold-timid*). Peabody and later Felipe (1970) found a very clear descriptive factor in their analyses, and Felipe concluded that descriptive consistency is the first requirement to be satisfied in trait inferences. Our results, however, are more compatible with previous work on the so-called halo-effect, and suggest that there may be instances when subjects are prepared to sacrifice some measure of descriptive consistency to achieve evaluative consistency instead. Considering the difference between our results and the findings of Peabody (1967, 1970) and Felipe (1970), the predominance of evaluative consistency in our study may derive from the descriptive ambiguity of the judgmental labels that were provided. Another possible explanation is that the present task deals with a more involving and emotional issue than is typical in most studies concerning trait inferences (cf. Fishbein and Ajzen, 1975, p. 124). Assuming that involvement is related to extremity of agreement level (see e.g. Sherif and Sherif, 1970) this predominance of evaluative consistency is indeed most obvious in the extreme agreement levels. These last results suggest that Fishbein and Ajzen's (1975, p. 215) conclusion that 'descriptive and informational beliefs are not capricious, nor are they systematically distorted by motivational or emotional biases', could be premature and needs further attention.

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### RÉSUMÉ

Dans la première expérience on a voulu étudier de quelle manière les connotations (positives ou négatives) de termes utilisés pour caractériser les énoncés affectent la relation entre les attitudes propres des juges et la polarisation des jugements quant aux énoncés eux-mêmes. Cent cinq conscrits ont évalué 28 items se rapportant à l'utilisation de la drogue sur deux types d'échelles d'évaluation. Les résultats montrent que les juges polarisent d'autant plus sur une échelle que leurs évaluations des énoncés sont cohérentes avec les connotations des étiquettes des échelles.

Dans une deuxième expérience on demandait à 82 sujets (hommes et femmes) d'évaluer cinq adjectifs selon qu'ils convenaient plus ou moins pour caractériser les énoncés d'attitude. Les résultats semblent montrer que les connotations rendent compte de la relation entre les attitudes des juges et les préférences pour des termes particuliers lorsqu'il s'agit d'attribuer des adjectifs à des énoncés d'attitude. D'autres analyses suggèrent que cette préférence pour des adjectifs qui sont cohérents, quant à la signification évaluative, avec l'attitude propre vaut même dans le cas où les adjectifs sont moins corrects d'un point de vue descriptif.

### ZUSAMMENFASSUNG

Untersuchte, wie sich Wertkonnotationen der Urteilssprache auf die Beziehung zwischen den Attitüden der Beurteiler und der Polarisierung ihres Urteils auswirken. Die Vpn (Wehrpflichtige,  $n = 105$ ) rateten 28 Aussagen zum Drogenkonsum auf zwei verschiedenen Arten von Ratingskalen. Die Ergebnisse deuten daraufhin, daß die Vpn auf solchen Rating-skalen stärker polarisierten, bei denen die Wertkonnotationen der Skalenbezeichnungen damit übereinstimmten, wie die Vpn die Aussagen bewerteten. In einem zweiten Experi-



ment wurden 82 Vpn (männliche und weibliche Studenten) gebeten, Eigenschaftsworte in eine Rangfolge dahingehend zu bringen, wie gut sich diese zur Charakterisierung von Attitudenaussagen eignen. Die Ergebnisse legen den Schluß nahe, daß, wenn Eigenschaftsworte Attitudenaussagen zugeordnet werden, Wertkonnotationen auch die Beziehung vermitteln, die zwischen der Attitüde des Beurteilers und der Bevorzugung von bestimmten verbalen Etiketten besteht. Eine weitergehende Analyse legt nahe, daß die Bevorzugung von Eigenschaftsworten, die in der Bewertung mit der eigenen Attitüde übereinstimmen, auch dann fort dauert, wenn die Eigenschaftsworte in der Beschreibung eigentlich weniger zutreffen.

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