

Effects of task orientation and level of prior agreement on willingness to agree*

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The effects of prior agreement from others on one's subsequent willingness to agree were examined under both individual and group-oriented conditions. Under both orientations, the level of subsequent agreement was highest following unanimous (100%) prior agreement from others, lowest following strong partial (75%) agreement, and moderate following still lower levels of prior agreement (50% and 25%). The applicability of social exchange formulations was tested and found inadequate under circumstances where the prospect of future gain from the exchange was minimal.

The present study explores the willingness to agree or conform to others when they have, to varying degrees, agreed previously with one's own judgments. Hollander & Willis (1967) have suggested two reasons for such exchange of agreement: "reward to the other which smooths the path for interaction and provides for further prospects for rewarding exchange" and "payment in advance for anticipated rewards [p. 72]." Previous research by Hollander, Julian, & Haaland (1965), Julian, Ryckman, & Hollander (1969), and Julian, Regula, & Hollander (1968) has examined a number of variables that determine this tendency to exchange agreement. The present study focuses on the individual's group orientation as a factor which facilitates the reciprocation of agreement.

In the context of the present research, we began with the general hypothesis that the willingness to agree with or conform to others is positively related to their prior agreement with you under similar circumstances. That is to say, relatively high levels of agreement or conformity were predicted to occur under conditions where one had previously received high levels of task agreement from the others and, conversely, relatively low levels of agreement were expected to be reciprocated following low levels of prior agreement. The relationship that has repeatedly emerged, however, between prior agreement and one's later willingness to agree has been a complex one. Specifically, although unanimous prior agreement (100%) from others produces high levels of reciprocated agreement, a high but nonunanimous level of prior agreement (75%) yields very low levels of subsequent agreement. In addition, the level of agreement in response to intermediate partial agreement (50%) is lower than that for minimal agreement

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conditions (25%), and both of these latter conditions yield higher agreement than a 75% prior agreement condition. Since exchange theory would predict a monotonic relationship between prior and subsequent agreement, the question remains of the usefulness of a social-exchange framework for understanding the exchange of agreement.

The present study clarifies the importance of the situational context in supplying the value to the agreeing response and, hence, its role in determining the tendency to exchange agreement. Results from earlier research in this series indicated that the parameters of the experimental situation were important in shaping the resultant relationship between the experience of prior agreement and subsequent willingness to agree. For example, in the Julian et al (1968) experiment, individual group members were functionally autonomous and were not dependent on each other for achieving a group goal. For such conditions, results showed that the exchange of agreement arose primarily from "informational" social pressures (cf. Jones & Gerard, 1967). The individual group member was concerned primarily with his personal competence at the task and used the judgments of others as validation of his own interpretation of events and his ability to deal with them.

This analysis of earlier studies led to the conjecture that a direct exchange of agreement would more likely emerge under bonafide "group" conditions, where there was a group goal that was mediated by individual task performance and where there was some prospect for continued group interaction. Under such group-oriented conditions, there would be a stronger tendency to reciprocate agreement because of the value of the exchange in "smoothing the path for interaction" and the positive effects of prior agreement on the attractiveness of the group. Hence, it was predicted that

under group-oriented conditions there would be a positive relationship between the level of prior agreement and subsequent willingness to agree: under individually oriented conditions, the obtained relationship should replicate earlier findings. The contrast between the two relationships was, therefore, predicted to be greatest following strong but nonunanimous (75%) prior agreement.

SUBJECTS AND DESIGN

One hundred sixty undergraduate women at the State University of New York at Buffalo participated as part of their introductory psychology course requirements. Three Ss were eliminated from the analysis because they indicated that they had prior knowledge about the experiment. The basic design was a 2 by 4 by 2 factorial with group vs individual orientation forming the first factor, levels of prior agreement (100%, 75%, 50%, and 25%) the second factor, and two questionnaire conditions the third factor. The questionnaire conditions varied in that for half of the design, Ss completed an intervening questionnaire immediately following the prior agreement phase, in addition to a final postsession questionnaire. For the other half of the design, only the postsession questionnaire was completed. There were 15 Ss per cell in the "intervening questionnaire" conditions and five Ss per cell for the "no questionnaire" conditions. The questionnaire factor in the design permitted an assessment of the Ss' reactions to the orientation and prior agreement manipulations before introducing pressure toward agreement during the second conformity phase. Data from the intervening questionnaire formed only a 4 by 2 design.

EXPERIMENTAL PROCEDURE

Ss reported to the laboratory in groups of five. They were introduced and seated in cubicles which visually isolated one from another. Each cubicle contained a panel of switches and lights for response signaling. The situation was presented as one that was "exploring procedures for processing group decision making, where the information is of the sort used by air traffic control."

The task required Ss to judge for each of 40 trials which of three stimulus lights went off first. On each trial their judgments were ostensibly communicated to the others in the group and to the E. A set of 20 judgments comprised the first phase, during which each S was given to understand that she was responding first and that the other four members of the group were responding in turn. For the second phase Ss appeared to shift response position and now perceived that they were

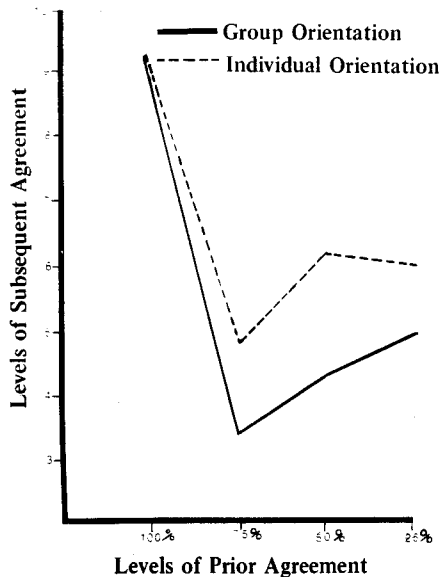


Fig. 1. Mean agreement following each level of prior agreement under group and individual orientation.

in the last position for a second set of 20 judgments. Five of these latter "pressure" trials were noncritical in that the other members of the group were seen to choose the correct light. On the critical trials the other members were all seen to choose a wrong light as correct.

Ss were led to believe that there would be additional sets of judgments with the response positions differing for each set. Actually, all Ss responded at the same time for all trials. Their willingness to agree was assessed during the second phase in terms of the number of trials out of the critical 15 on which they agreed with the erroneous judgments of the others. Reactions to the experimental conditions were obtained from the intervening and postsession questionnaires, each of which comprised the same 6-point graphic rating items (see Table 1).

MANIPULATION OF PRIOR AGREEMENT

Levels of prior agreement were created during the first phase by having differing proportions of the group members appear to agree with the judgments made by the S. This was accomplished by the presentation of particular patterns of lights on the Ss' signaling panels. To ensure that Ss attended to these communications, they were asked to record their own and their peers' judgments after each trial. For the 100% agreement condition, Ss saw all four of the other members of the group agree with them on each of the 20 trials; for 75% agreement, they saw only three of the other four members agree with them, with a different member appearing to disagree on each trial; 50% and 25% agreement

conditions were similarly manipulated.

MANIPULATION OF GROUP AND INDIVIDUAL ORIENTATION

The group and individual orientation conditions were created by presenting different initial instructions to the groups. For the group orientation, Ss were led to believe that the group had been specially selected on the basis of certain personality data provided in their psychology class and that their performance was being compared with a group "working across the hall." For the individual-orientation condition, no reference was made to any special basis on which the Ss were selected or to the fictitious comparison group. In addition, for the group condition, while the E was reading the task instructions he was interrupted by a second E, apparently from across the hall, who engaged in a brief dialogue aimed at enhancing the credibility of the presence of the other group.

RESULTS AND DISCUSSION

Effects of Prior Agreement Under Group and Individual Orientations

Figure 1 shows the complex effects which levels of prior agreement exerted on the Ss' subsequent willingness to agree. The general shape of the curves replicates earlier studies in this series ($F = 11.61$ for levels of agreement, $p < .01$, $df = 3,141$). Contrary to prediction, this relationship was substantially the same under both the group and the individual orientation conditions.¹ Quite clearly, the predicted increase in agreement following 75% prior agreement under the group orientation condition did not occur. Indeed, the consistent effect of the group orientation

was to reduce the tendency to agree (group vs individual orientation: 5.55 vs 6.65, $p < .10$).

An examination of the Ss' reactions to the experimental conditions, shown in Table 1, provides some clues to the interpretation of these unexpected results. Only two ratings on the intervening questionnaire showed significant effects of group vs individual orientations. These were Item 1, increased enjoyment of the task (3.72 vs 3.01; $F = 12.5$, $p < .01$), and Item 7, increased attraction to the group (3.81 vs 3.21; $F = 18.7$, $p < .01$), under group orientation as compared with the individual orientation conditions. However, there was not a greater concern with the others' evaluation of one's judgments (Item 4), and Ss did not consider it more important for the group to do well under the group-oriented condition (Item 2). Thus, although the group orientation manipulation enhanced the enjoyment and attractiveness of the experimental group situation, it apparently did not induce greater pressure toward competent or uniform group performance. Furthermore, as Item 7 revealed, attraction to the group did not vary significantly as a function of the level of prior group agreement ($F < 1.0$ for levels of agreement).

Thus, reactions on the intervening questionnaire indicated only partial success in creating group-oriented conditions. The girls were more attracted to the others and enjoyed the task relatively more under the group orientation. However, the ratings of how important it was for the group to do well and their concern with what the other girls might think when they disagreed showed only weak effects of the

Table 1
Mean Ratings of Each Condition on the Intervening Questionnaire

Items	Orientation	Level of Prior Agreement			
		100%	75%	50%	25%
1. How much did you enjoy the light discrimination task? ^b	Group	3.33	4.47	4.07	4.07
	Individual	3.27	3.33	3.13	3.13
2. How important was it for your group to perform well?	Group	3.13	3.53	3.21	3.29
	Individual	2.73	3.07	3.13	3.60
3. How difficult were the light discriminations? ^a	Group	2.53	2.87	3.64	3.86
	Individual	2.33	3.40	3.53	4.33
4. How concerned were you with what the other girls might think of you if you disagreed with them?	Group	2.73	2.20	1.93	2.00
	Individual	2.33	2.27	2.33	2.27
5. How confident were you of your judgments? ^{ab}	Group	4.47	4.33	3.64	3.50
	Individual	4.53	3.80	3.33	2.80
6. How often did you and the other members of the group disagree? ^a	Group	1.93	2.87	3.57	4.93
	Individual	1.93	2.93	3.73	4.47
7. How much would you enjoy participating with this same group on a similar task? ^b	Group	4.07	4.47	4.14	3.93
	Individual	3.33	3.33	3.33	3.20
8. How much were you influenced by the judgments of the other members of the group?	Group	1.53	1.20	1.00	1.14
	Individual	1.20	1.07	1.13	1.13

^aRating items 3, 5, and 6 were significant at $p < .01$ for level of agreement.

^bItems 1 and 7 were significant at $p < .01$ for group-individual orientation.

group-individual variation. Concern over what the other girls might think tended to parallel the amount of agreement actually produced under group-oriented conditions. While this result is consistent with our hypothesis that greater concern would yield higher levels of agreement, the effect is relatively weak.

Consistent with earlier findings, Table 1 shows that Ss' task confidence (Item 5) and perceived task difficulty (Item 3) varied predictably and significantly as a function of prior agreement. Task confidence decreased under both orientations as the level of prior agreement diminished, and perceived task difficulty increased directly as a function of prior agreement. Thus, these findings corroborated the hypothesis of the Julian, Regula, & Hollander (1968) study of the mediating role that task confidence plays in determining the effect which the level of prior agreement has on subsequent willingness to agree. Ratings under the comparable individually oriented conditions again showed that following 100% agreement, the task was seen as distinctly less difficult than any of the partial agreement conditions. This result confirmed again the "over-confidence" that apparently leads to the dramatic increase in subsequent agreement following 100% prior agreement.

Post-Session Ratings

The postsession questionnaire reflected the complex combined effects of the independent conditions and the influence phase of the experiment and, therefore, is difficult to interpret unambiguously. The greater enjoyment and attraction of group-oriented conditions shown on Items 1 and 7 of the intervening questionnaire were reaffirmed on the postsession questionnaire, again with no differential effects of levels of prior group agreement. Strong effects of the prior agreement conditions were revealed on the postsession ratings of perceived disagreement and perceived influence. Quite veridically, Ss said they agreed more with the others in Phase 2 of the 100% prior agreement condition and agreed less following the lower levels of prior agreement. Veridical perceptions were also indicated by the ratings of perceived influence under the 100% and 75% conditions. However, there was minimal perceived influence attributed to the others' judgments under the 25% agreement condition, although, as Fig. 1 shows, there were relatively higher levels of agreement there.

This study attempted to demonstrate the exchange of agreement under minimal group conditions, with only partial success. In his recent review, Nord (1969) has suggested that two things are necessary for

exchange: a medium and something that is to be gained in the exchange. In the present paradigm, the assumption has been made that "agreement" functions as such a medium for exchange—that agreement from others is a desirable commodity for which there is a demand. Given a medium of exchange in both orientations, then, the next question can be phrased: What is gained by the exchange under group-oriented rather than individually oriented conditions? It would appear that a critical factor in maintaining exchange processes as stressed by Hollander & Willis (1967) and more recently by Pruitt (1968) is the anticipation of future reward from the exchange. Recognition of this factor implies that the tendency to reciprocate agreement under circumstances such as those studied here does not depend so much on the agreement previously supplied by the others, but rather on whether continued agreement with those others is seen to build the potential for future rewards. Although in the present study, Ss were led to believe there would be a number of sets of group judgments, they knew that they had been recruited for only 1 h to participate in groups which

essentially had no future. If this observation is correct, then it suggests the necessity of focusing on natural or long-term groups in any test of exchange processes.

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NOTE

1. The F value for the interaction of level of agreement with orientation was less than 1.00.

Scaling apparent distance in a natural outdoor setting

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Judgments of apparent distance in outdoor settings are power functions of physical distance, just as they have been shown to be in indoor settings. But the exponents obtained out of doors are not only appreciably lower—all less than 1.00—but are affected by range: the exponent is largest for the smallest ratio of extreme distances.

There is evidence that apparent distance judged in natural indoor settings is an accelerating function of physical distance. Künnapas (1960) and Teghtsoonian & Teghtsoonian (1969) have obtained judgments of indoor distances which are power functions of physical distance, the exponents ranging from 1.15 to 1.47. On the other hand, distance judgments in outdoor settings show no such acceleration: E. J. Gibson and her associates (1954, 1955), Gilinsky (1951), Harway (1963), and Luria, Kinney, & Weissman (1967) have found apparent

outdoor distance to be nearly linear with physical distance or a decelerating function of it.

But these two groups of studies differ in at least two respects other than setting. First, ranges used out of doors tend to be larger than those used indoors, and these larger ranges, rather than any intrinsic characteristic of the setting, may account for the difference in exponents. Second, direct comparison of the two groups of studies is hampered by the wide variety of scaling techniques represented. Therefore, it seemed desirable to apply the methods of our study of indoor distances (Teghtsoonian & Teghtsoonian, 1969) to an outdoor setting, employing ranges comparable to those previously studied

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