Social comparison, attraction, and choice

of a comparison other*

PAUL R. BLEDA and CARL H. CASTORE

Purdue University, Lafayette, Indiana 47907

The effects of attitudinal similarity and task-relevant affiliative status, together with three situational factors (presence or absence of a monetary reward, choice of information source or work partner, and choice made before or after Ss completed preliminary work on the task), on the choice of comparison others were examined. The most significant determinant of the comparison other chosen was attitude similarity (p < .01). There was also a significant interaction between attitude similarity, task-relevant affiliative status, and time of choice (p < .05). The nature of the interaction suggested that general impressions such as conveyed by general attitudinal information may be more important in the selection of referent others than comparability on situation-specific factors.

Festinger (1954) presented the theory of social comparison processes as a system of interrelated hypotheses, derivations, and corollaries in which a key assumption is that, in order to achieve accurate self-evaluations, individuals will tend to compare their opinions and abilities to those of similar others. Although the meaning of similarity within a social comparison framework was not precisely delineated, some authors (Castore & DeNinno, 1972a) have suggested that Festinger conceptualized similarity along task- or situation-relevant dimensions as perceived by the individual. In other words, people who are similar to oneself with regard to a particular opinion or to attributes related to that opinion will be seen as the proper referents for that opinion (Berscheid, 1966). The development of the concept of a proper referent may be traced through the following statements taken from social comparison theory. In Derivation E (from Hypotheses 1, 2, and 3), Festinger states, "Any factors which increase the strength of the drive to evaluate some particular ability or opinion will increase the 'pressure toward uniformity' concerning that ability or opinion." Further, in Hypothesis 7, "Any factors which increase the importance of some group as a comparison group for some particular opinion or ability will increase the pressure toward uniformity concerning that ability or opinion within that group." Last, in the corollary to Derivation E, "An increase in the importance of an ability or an opinion, or an increase in its relevance to immediate behavior, will increase the pressure toward reducing discrepancies concerning that ability or opinion.'

In contrast to social comparison theory that stresses the role of relevant similarity in comparison processes, related work within the attraction paradigm (Byrne, 1971) has demonstrated the importance of overall similarity in determining general evaluative behavior (e.g., likability). The implication of this work is that

individuals will respond to all the information provided about another person that potentially may be instrumental to obtaining reciprocal rewards. Moreover, to the extent that choice of a comparison other is dependent upon such evaluative responses, overall similarity might be expected to play an important role in determining referent preference.

A recent study (Castore & DeNinno, 1972a) examined the effects of both overall and task-relevant attitude similarity on the choice of a comparison other under task conditions in which (1) a high premium was placed on taking a unanimous group position on an issue and (2) group consideration of various alternatives to a particular issue was emphasized. Ss were given a choice of task partners who were either highly similar or dissimilar to them on a scale of 10 general attitudes and either in agreement or disagreement with them on one task-relevant attitude item. Preferences of a potential comparison other were found to be affected only by overall attitude similarity. However, these results may be attributed to the disproportionate amount of overall similarity as compared to task-relevant similarity presented to the S. In an extension of this study, Castore and DeNinno (1972b) also varied the proportion of task-relevant information available to Ss (25%, 50%, or 75%). Again, only overall attitude similarity was found to influence the choice of a potential comparison other. These researchers concluded that individuals will make use of all the information made available to them in their selection of a referent other. The practical implications of these results are that, even in situations where a diversity of opinions might prove beneficial to reaching a group goal, individuals prefer to work with very similar others.

À number of studies (e.g., Wheeler, 1966) examining the choice of a comparison other have worked within a research paradigm different from that utilized by Castore and DiNinno. The typical procedures employed in these studies have required Ss to respond to a scale purportedly designed to assess some particular personality trait. After completion of this task, Ss received false information regarding their own relative standing within the group and were offered the

^{*}This research was supported in part by Contract N00014-67-A-0226 from the Office of Naval Research held by the second author. The authors wish to thank Sharon Bleda and Paul Bell for their assistance in the completion of this investigation. Requests for reprints should be sent to the second author.

opportunity to receive further information about the scores of other group members. Support for social comparison theory is derived from those studies in which individuals prefer to receive further information about the score closest to their own. A comparison of the research strategies of these studies and of the subsequent work of Castore and DeNinno indicates the following two procedural differences: (1) the reversal of the temporal sequence of task performance and choice of a comparison other and (2) the presence or absence of anticipated interpersonal interaction with the comparison other who is selected. The present investigation seeks to examine the effects of both overall attitude and task-related similarity on the choice of a comparison other within both types of research paradigms.

Two important aspects of the present study are the addition of a monetary incentive variable and a redefinition of task-relevant similarity. The monetary incentive variable was included to induce conditions of high and low motivation. It was expected that when Ss are highly motivated to perform well on a task requiring a diversity of opinions about an issue they will evidence a stronger preference for dissimilar others than under conditions of low incentive. Task-relevant similarity was operationally defined in this study to refer to similarity between the S and the potential comparison other with respect to an attribute related to the task. This operational definition may be distinguished from that used by Castore and DeNinno, in which similarity was defined in terms of a task-relevant attitude.

METHOD

Design

The present investigation used a 2⁵ mixed factorial design with three between factors (monetary incentive, task-referent choice sequence, and type of potential social comparison situation) and two within factors (overall similarity between Ss and persons available as referent others and similarity on a task-related attribute). The two monetary incentive conditions were: (1) a prize condition, in which Ss were informed that three \$30 prizes would be awarded to the individuals composing the three best essays, and (2) a no-prize condition, in which no mention of monetary prizes was made.1 The two task-referent choice sequence conditions were: (1) a pretask condition, in which Ss chose a comparison other before beginning their task, and (2) a posttask condition, in which Ss selected a referent other after completing the task. The two types of social comparison situations were: (1) an information source condition, in which Ss were told that they would be allowed to inspect another person's essay, and (2) an interaction condition, in which Ss were informed that they would interact with another person by working on the task together (for Ss in the pretask condition) or by discussing the completed task (for Ss in the posttask condition).

Ss completed a general survey of attitudes (Byrne, 1971) that included nine attitude topics covering a wide diversity of topics (e.g., environmental pollution, marriage, etc.) and one task-relevant item concerning the respondent's affiliative status with respect to the Greek system (fraternities and sororities) on the Purdue campus. Responses to attitude items were made along a six-point scale. Overall similarity and task-related similarity between Ss and those persons available as comparison

others were manipulated through responses to the attitude survey; Ss were presented with responses purportedly made by four other alleged participants in the experiment. The responses of two of the four potential comparison others were in general agreement with the S's responses on 8 of the 10 items (high overall similarity). The other two persons' responses showed general agreement on only 2 of the 10 items included on the survey of attitudes (low overall similarity). The high and low overall similar others were further subdivided on the basis of task-related similarity, i.e., Greek or independent status.

Subjects

One hundred students (40 males and 60 females) from introductory psychology classes at Purdue University participated in the present experiment to fulfill a course requirement. All Ss were "independent" with respect to the Greek system at the time of their participation, i.e., Ss were not affiliated with either a fraternity or sorority.²

Procedures

The experimental session was conducted in groups of five Ss who were informed that the experiment was part of a comprehensive study of the role of the Greeks within Purdue University. They were further instructed that their task would be to write a short essay entitled "The Role of the Greek System at Purdue University," in which they would summarize both the positive and negative aspects of fraternities and sororities within the educational program. Ss completed this task either after selecting a referent other (pretask condition) or before indicating their choice (posttask condition). Half of the Ss were told that the individuals composing the three best essays would receive \$30 prizes (monetary incentive condition), while the remaining half were not given this information (no-prize condition). In addition, Ss were informed either that they would be allowed to inspect the essay of the person of their choice (information source condition) or that they would actually interact with the person who they selected (interaction condition).

Each S was presented with four different sets of responses to the general survey of attitudes that were purportedly those of four other people in the experiment. The four types of potential comparison others available to Ss were (1) one who was in agreement with the S on seven of the nine attitude items and similar with respect to affiliative status (independent), (2) one who was in agreement with the S on eight of the nine attitude items and dissimilar with respect to affiliative status (Greek), (3) one who was similar to the S on one of the nine attitude items and also an independent, and (4) one who was similar to the S on two of the attitude items and a Greek. Attitude similarity was defined as a response one scale position away from and on the same side of the neutral point as the S's response. Dissimilarity was defined as a response three scale positions away from and on the opposite side of the neutral point from the S's response. The specific attitude items that were either similar or dissimilar to those of the S were randomly varied across similarity conditions. In addition, the order of presentation of the potential comparison others was randomized across Ss.

After inspecting the responses of each potential comparison other, Ss completed a modified form of Byrne's (1961) interpersonal judgment scale (IJS). Included on the IJS were five seven-point rating scales to be used in the evaluation of each of the potential comparison others in terms of intelligence, knowledge of current events, morality, likability, and desirability as a work partner in an experiment. The latter two items were summed to yield a standard index of attraction ranging in value from 2 (most negative) to 14 (most positive), with a split-half reliability of .85 (Byrne, 1971, p. 52). Ss were also asked to rank order their preferences for each type of available comparison others either as an individual whose essay they would most like to see or as an individual with whom they would most like to interact. Ss were further asked to indicate their reasons for ranking each of the comparison others as they did. A debriefing session followed the selection of a comparison other and the completion of the task.

RESULTS

One concern of the present investigation was to ascertain the effects of overall agreement and task-related similarity on interpersonal evaluations. All of the response scales on the modified IJS were analyzed, with separate 2⁵ mixed-model least-squares analyses of variance for three between- and two within-group factors (Winer, 1971). The results of these analyses indicated significant effects of overall agreement on intelligence (F = 99.04, df = 1/92, p < .001), knowledge of current events (F = 89.43, df = 1/92, p < .001), likability (F = 158.18, df = 1/92, p < .001), desirability as a work partner (F = 152.47, df = 1/92, p < .001), and the standard index of attraction (F = 170.30, df = 1/92, p < .001). Highly similar potential comparison others received more positive ratings of intelligence, knowledge of current events, likability, desirability as a work partner, and attraction than highly dissimilar others. The effects of overall agreement on ratings of morality did not approach statistical significance (F = 1.11, df = 1/92, p > .05).

Task-related similarity was also found to affect significantly ratings of intelligence (F = 7.92, df = 1/92, p < .01), knowledge of current events (F = 7.12, df = 1/92, p < .01), likability (F = 5.37, df = 1/92, p < .05), desirability as a work partner (F = 4.23, df = 1/92, p < .05), and attraction (F = 6.20, df = 1/92, p < .02). The effects of task-related similarity on the remaining personal dimension, morality, did not reach statistical significance (F > 1). Greek potential comparison others received higher ratings on intelligence, knowledge of current events, likability, desirability as a work partner, and attraction than independent comparison others.

In addition to the main effects of both overall and task-related similarity on interpersonal evaluations, significant interactive effects of task-referent choice sequence, overall agreement, and task-related similarity on likability (F = 4.39, df = 1/92, p < .05), desirability as a work partner (F = 4.05, df = 1/92, p < .05), and attraction (F = 5.59, df = 1/92, p < .05) were obtained. Figure 1 presents the graph of these results for the standard index of attraction. For the pretask reference choice condition, attraction ratings of similar comparison others were not found to differ between those who were in the independent condition and those in the Greek condition, whereas dissimilar comparison others in the independent condition received more negative ratings than dissimilar comparison others in the Greek condition. However, for the posttask referent choice condition, attraction ratings were lower for similar comparison others in the independent condition

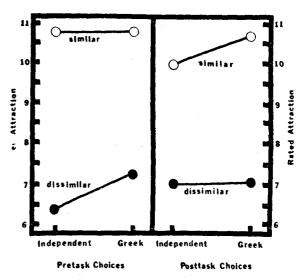


Fig. 1. Attraction response for different conditions of task-referent choice sequence, overall agreement, and task-related similarity.

than for similar comparison others in the Greek condition, whereas no difference was found between attraction ratings of dissimilar others in the two task-related conditions. These results indicate that (a) dissimilar-independent comparison others were more negatively evaluated in the pretask referent choice condition than in the posttask referent choice condition and (b) similar-independent others were less positively evaluated in the posttask referent choice condition than in the posttask referent choice condition than in the pretask reference choice condition.³

The primary concern of the present study was to examine the effects of both overall agreement and task-related similarity on the choice of a comparison other under different stimulus conditions. Median ranks of various types of available others (similar independent, similar Greek, dissimilar independent, dissimilar Greek) under different conditions of monetary incentive, type of social comparison, and task-referent choice sequence are presented in Table 1.

The results of individual analyses of variance for related samples with ranked data (Siegel, 1956) indicated significant differences in preference for the four types of potential comparison others. In each condition of the three between factors, the order of preference from high to low was: (1) similar Greek, (2) similar independent, (3) dissimilar Greek, and (4) dissimilar independent. These findings indicate that both overall agreement and task-related similarity differentially affect the choice of a comparison other. This finding directly parallels the results obtained from the main effects, which indicated that both overall agreement and task-related similarity affect interpersonal evaluations. However, unlike those results regarding interpersonal evaluations, Table 1 does not provide any evidence of a three-way interactive effect of task-referent choice sequence, overall agreement, and task-related similarity on the choice of a comparison other.

	Type of Comparison Other						
Variables	SI*	SG**	DI†	DG††	x²	df	p
No Prize	1.90	1.56	3.67	3.03	50.45	3	< .0001
Prize	2.00	1.28	3.54	3.21	73.03	3	< .0001
Information Source	2.10	1.46	3.39	3.06	49.77	3	< .000
Task Partner	1.83	1.33	3.74	3.14	88.01	3	< .000
Pretask Choice	1.89	1.47	3.56	3.08	63.74	3	< .0001
Posttask Choice	2.03	1.30	3.67	3.17	58.60	3	< .0001

Table 1 Median Ranks of Various Types of Comparison Others Under Different Conditions of Monetary Incentive Social Comparison, and Task-Selection Sequence

*overall similarity independent **overall similarity Greek †overall dissimilarity independent ‡‡overall dissimilarity Greek

DISCUSSION

In accordance with previous empirical findings in the area of interpersonal attraction (Byrne, 1971), the present investigation found that interpersonal evaluations are determined to a large extent by the degree of overall similarity between individuals. Similar others were evaluated more positively than dissimilar others along several personal dimensions, including intelligence, knowledge of current events, likability, desirability as a work partner, and attractiveness. These results seem to indicate that not only do people perceive similar others as having personality attributes generally associated with overall competence (e.g., being intelligent and knowledgeable) but also they possess certain attributes (e.g., likability, desirability, attractiveness) that would contribute to a more pleasant personal interaction. In view of this, it seems reasonable that individuals prefer similar others as both a source of information about a task and as a person with whom to interact under various types of situations. These results and those reported by Castore and DeNinno (1972a, b) seem to suggest that investigations of social comparison processes might be subsumed under Byrne's (1971) attraction paradigm.

Task-related similarity was also found to have a differential effect on interpersonal evaluations. Greek potential comparison others were evaluated more positively in terms of all the personal dimensions included on the IJS (except morality) than available independent others. Furthermore, greater preference was evidenced for available Greek others as both a source of information about the task and as an individual with whom to interact than independent others. Before concluding that independents tend to evaluate Greeks more positively along several personal dimensions than other independents, the manner in which overall agreement and task-related similarity were manipulated should be considered. In both the similar and dissimilar conditions, available others presented as independents, although similar to the S with respect to this task-related attribute, were dissimilar on one more attitude item than those presented as Greeks. It is quite possible that Ss were simply responding to overall attitudinal similarity

rather than to any specific information regarding affiliative status with respect to the Greek system. Further support for this interpretation is derived from the reasons offered by Ss for rank ordering the available others as they did. Of the 100 participants in the experiment, 77 explicitly stated that their order of preference was determined by overall similarity, whereas only 15 gave any indication that their choices were affected by the potential comparison others' status with respect to the Greek system. These findings seem to indicate that individual attitude items, in general, were more influential in determining interpersonal evaluations and choice of a comparison other than either affiliation or nonaffiliation with fraternities or sororities. A possible source of this differential effect may be the relative importance attached to such attitude issues (included on the general survey of attitudes) as sexual freedom, capital punishment, and environmental pollution, as compared to Greek affiliation.⁴

The present study also found that overall agreement, task-related similarity, and task-referent choice sequence interact to affect evaluations of likability, desirability, and the combined index of attraction. Similarity on the task-related attribute appeared to have less influence on attraction when (a) the available other was dissimilar and selections occurred prior to rather than after task performance and (b) the available other was similar and choices were made after rather than before the task was completed. It is possible that instructing Ss to select an available other prior to beginning the task may have introduced a mental set to evaluate others in terms of their potential utility for task completion. Ss not only may have anticipated having difficulty integrating the ideas of the dissimilar independent with their own but also may have perceived him (her) as being unable to provide useful information about the Greek system. However, in the posttask condition, evaluations of attraction may have been influenced by the Ss' curiosity about how others had performed the task. Under these circumstances, the perceived lack of utility previously associated with the dissimilar independent may have no longer been a relevant consideration. On the other hand, Ss may have perceived similar independents in the pretask condition as possessing a singular advantage of

having ideas particularly amenable to integration with their own. This advantage may have been less relevant in the posttask evaluation of similar-independent others when curiosity about the performance of others was more important than consideration of potential instrumentality.

The results of the present study provide little support for some of the basic tenets of the theory of social comparison processes. In two distinct types of experimental situations (i.e., pretask and posttask) and under two conditions of monetary incentive, individuals chose to receive either further information from or to affiliate with others who were generally similar to themselves rather than with others who were similar on only a task-related attribute.

REFERENCES

- Berscheid, E. Opinion change and communicator-communicatee similarity and dissimilarity. Journal of Personality & Social Psychology, 1966, 4, 670-680.
- Byrne, D. Interpersonal attraction and attitude similarity. Journal of Abnormal & Social Psychology, 1961, 62, 713-715.
- Byrne, D. The attraction paradigm. New York: Academic Press, 1971.
- Castore, C. H., & DeNinno, J. The role of relevance in the choice of comparison others. Proceedings of the 80th Annual Convention of the American Psychological Association, 1972a.
- Castore, C. H., & DeNinno, J. The relevance of relevance in the selection of comparison others. ONR Technical Report No. 2 (Contract No. N00014-67-A-0226), Purdue University, November 1972b.

- Festinger, L. A theory of social comparison processes. Human Relations, 1954, 7, 117-140.
- Siegel, S. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill, 1956.
- Wheeler, L. Motivation as a determinant of upward comparison. Journal of Experimental Social Psychology, 1966, Supplement 1, 27-31.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1971.

NOTES

1. A total of three \$30 prizes were actually awarded in this study.

2. Further information concerning Ss' subsequent status with respect to the Greek system was obtained through personal contact during the semester immediately following the experiment. Of the 69 participants who could be reached, 11 reported that they either were in the process of pledging or intended to pledge in the near future.

3. A further overall analysis was performed comparing the attraction responses of Ss who had favorable attitudes toward the Greek system (as determined from their essay and personal communication) with those who had either neutral or unfavorable attitudes toward the Greek system. The only difference obtained was that pro-Greek individuals evidenced higher evaluations of attraction toward all types of comparison others than neutrals or individuals against the Greek system.

4. Previous work (Byrne, 1971, pp. 64-65) has reported that students consider the Greek system, as an attitude issue, to be relatively low in importance (mean rating = 1.93 out of 4.00).

(Received for publication March 28, 1973; accepted April 7, 1973.)