Psychological Sense of Community Among Treatment Analogue Group Members[1]

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The present study investigated the construct of psychological sense of community among individuals in a treatment analogue context. Specifically, sense of community among group members was examined as a function of three variables which have received extensive attention in the experimental social psychology literature and are central characteristics of many treatment settings: (a) perceived similarity with others in a group, (b) perceived freedom of choice in selecting a group, and (c) salience of membership in a category or group. As hypothesized, a main effect was found for valence of perceived similarity, with greater sense of community among those with a positive as contrasted to a negative shared characteristic. The hypothesized main effect for perceived freedom of choice received partial support, with greater sense of community among individuals high in perceived choice. The hypothesized salience by perceived similarity interaction also received partial support. In the high choice condition, high salience decreased sense of community among respondents sharing a negative attribute.

Research on relationships among individuals in formal and informal groups has been conducted from a variety of perspectives. These have included studies of group cohesiveness in laboratory conditions (Cartwright, 1968; Lott & Lott, 1965), cohesiveness among members of therapy groups (Yalom, 1975), the functional aspects of social networks (Adams, 1967; Bott, 1971; Mitchel, 1969), and psychological components of social networks (Brim, 1974; Hirsch, 1979; Prociando & Heller, 1979). In the present investigation, the construct

"psychological sense of community" is seen as a unifying concept related to these divergent lines of research. In addition, by exploring the impact of perceived similarity, perceived choice, and categorization salience on psychological sense of community, the study provides an opportunity for further understanding of these constructs as well.

The manner in which individuals *perceive* their relationships with others has been described as a critical component in their coping and adaptation styles. Sarason (1974) has labeled the perception of one's relationships and networks as psychological sense of community. Based on Sarason's conceptualization and the related work of other researchers in this area (e.g., Caplan, 1974; Seeman, Bishop, & Grigsby, 1971) the following definition is offered: Psychological sense of community is the individual's perception that he or she is a positively accepted member of an immediately accessible social network or series of networks. Such networks are groups whose members are related in an interdependent and mutually supportive fashion, sharing a commitment to maintain their relationships over time. Sense of community is seen as lying on a continuum ranging from rejection and scapegoating on one extreme, to loneliness and isolation, and finally to psychological sense of community at the other extreme. Five dimensions of psychological sense of community are proposed: attraction, desired interaction/commitment, trust, belonging, and assistance (cf. Brim, 1974).

From the perspectives of both applied and basic research, treatment settings and groups are critical contexts for initiating the study of psychological sense of community. Perhaps in no other instance is the potential disruption of psychological sense of community as great as in the placement of an individual in a segregated setting for the purpose of intervening in a psychological, social, or educational problem (Sarason, 1974). Research on this process is indicated for both heuristic and practical reasons. First, on a heuristic level, monitoring psychological sense of community during such a time of anticipated change may provide a clearer picture of its nature as well as its relationship to other variables which have been examined in experimental contexts. Possible contributing factors and causal mechanisms may be most easily isolated and investigated during this process. On a practical level, the investigation of possible negative side effects of placement may be critical in understanding the effectiveness of such programs as well as providing a clearer assessment of the overall well-being of individuals involved in these settings.

While treatment settings vary on a number of dimensions, three characteristics may be of greatest relevance for the study of psychological sense of community: (1) perceived similarity with others, (2) perceived freedom of choice, and (3) categorization salience. The extensive experimental findings reported on each of these variables are instructive in generating hypotheses regarding their impact on psychological sense of community.

(1) *Perceived similarity.* Attraction has been shown to be increased by the perception that others hold similar attitudes or possess similar personality traits as oneself (Byrne, 1971). In the same manner, increased perceived similarity would be expected to enhance the attraction dimension of psychological sense of community and possibly other dimensions as well. However, the effect of perceived similarity on sense of community within a treatment context may not be positive. Several investigations have provided evidence that perceived similarity with another who has been identified as possessing a socially undesirable trait produces reactions of avoidance, dislike, and derogation of the other (Novak & Lerner, 1968; Taylor & Metee, 1971). Within treatment settings, individuals commonly (a) believe they possess an undesirable characteristic (e.g., a problem or disorder) and (b) perceive themselves as similar to others in the setting on this particular dimension. To represent an accurate analogue of interpersonal relationships in treatment contexts, the basic paradigm used by previous investigators needs to be enhanced by including these two conditions. More importantly, the use of psychological sense of community as a dependent measure allows for the investigation of the impact of perceived similarity on a wider range of interpersonal perceptions than simply attraction.

(2) *Perceived freedom of choice.* The perception of choice has been shown to have a facilitating effect on a number of psychological and behavioral variables (Perlmutter & Monty, 1979; Steiner, 1970). Similarly, the presence of psychological reactance as a result of loss of important "free behaviors" leads to inhibited or "negative" behaviors and attitudes (Brehm, 1966; Worchel & Andreoli, 1976). The impact of perceived choice and reactance on interpersonal relationships has not been examined. Treatment settings offer a likely context in which this line of investigation can be initiated, as they vary greatly in the degree of choice they offer participants in their relationships with others. Degree of perceived choice in selecting a treatment group or setting may affect subsequent interpersonal perceptions and relations in a manner similar to the facilitating effect of choosing one's treatment procedure on subsequent behavior change (Gordon, 1976; Kanfer & Grimm, 1978).

(3) *Categorization salience,* the degree of distinctiveness of differences between one's own group and other groups, has been cited as a primary factor contributing to evaluative and behavioral bias in favor of one's group (Brewer, 1979). While this construct has been studied in intergroup situations (e.g., Billig & Tajfel, 1973; Wilder & Thompson, 1980), Brewer (1979) concludes that its affect on ingroup bias is primarily in generating more positive attitudes towards the ingroup as a result of increased salience of ingroup-outgroup distinctions. To the extent that psychological sense of community represents attitudes towards members of one's group, categorization salience is expected to influence its strength. This would be particularly true in treatment contexts, as such groups and settings vary greatly in the degree to which their boundaries are

defined. Work with categorization salience has not attempted to create an analogue of treatment settings and has, in fact, attempted to work with the "minimal intergroup situation" (Billig & Tajfel, 1973) in which groups are neutrally defined. To be of relevance for treatment populations, it is important to examine the effects of categorization salience on psychological sense of community in groups with labels which vary in value from positive to negative. The work cited above regarding the effects of perceived similarity on a negative characteristic, when combined with research on categorization salience, suggests categorization salience may affect the *intensity* of attitudes toward the ingroup while the *direction* of these attitudes may be a function of the valence of the shared attribute.

Specific Hypotheses

The reported study investigated psychological sense of community among members of a treatment analogue group as a function of valence of perceived similarity (sharing a positive or negative attribute), perceived freedom of choice in selecting a group (choice or no choice), and categorization salience (high or low salience). A 2 X 2 X 2 factorial design was used to investigate the following hypotheses: (a) Psychological sense of community varies as a function of valence of perceived similarity, with a positive attribute leading to a greater sense of community than a negative shared attribute. (b) Psychological sense of community varies as a function of the perception of choice in selecting a group, with perceived choice leading to a greater sense of community than no choice. (c) Psychological sense of community varies as a function of an interaction between categorization salience and valence of perceived similarity, with high salience increasing sense of community when group members share a positive attribute and decreasing sense of community when members share a negative attribute.

METHOD

Subjects

Participants were 96 undergraduates, 60 female and 36 male, from introductory psychology courses. All students received course credit for participating. Assignments were made randomly to one of eight experimental conditions. Two students were dropped from the experiment upon being informed that there would be two sessions on two separate days in the study. Both did not wish to continue due to time and scheduling problems.

Procedure

After signing up for an experiment titled "Interpersonal Problem Solving Session," students reported individually. The room contained no experimental

apparatus, only two tables and two chairs. Students were falsely informed that they would be participating in an interpersonal problem-solving session in which they would discuss personal concerns with others. The purpose of the study was described as investigating how helpful these types of sessions can be. Each student was told the study required two meetings, the first of which involved completing a personality test and the second involving the problem solving session. In actuality, the experiment was concluded after the first meeting and no problem solving sessions were conducted.

In an attempt to portray the sample as diverse, students were told that the other participants included introductory psychology students, students from classes in the extended university, individuals responding to a local newspaper advertisement, and individuals seeking help at a psychology clinic. The experimenter then indicated that all participants had been asked to complete a personality test to identify the types of people participating in the sessions.

Perceived similarity manipulation. A bogus "personality test" composed of a number of true-false items suggestive of a personality inventory (e.g., "It is hard for me to say 'no' when others ask me for favors") was administered. Items were chosen to avoid those which might have an extreme negative effect on respondents' perceptions of themselves or their emotional state. The two key items for the purpose of the perceived similarity manipulation asked respondents to choose from a list four interpersonal traits they liked most about themselves and four they liked least about themselves. Lists of 15 positive (e.g., honest, sincere) and 15 negative (e.g., harsh, selfish) interpersonal characteristics were provided.

After the experimenter pretended to hand score the student's responses, the results were presented plotted on a modified form of a scoring sheet for a personality inventory. Each participant was shown a graph indicating that he or she scored highly on four scales. Two scales were given labels from the student's self-indicated most desirable interpersonal traits and two from his or her least desirable traits. That is, they were told that they scored highest on two traits which they indicated they liked in themselves and two they did not like. As a check of this manipulation, respondents were asked how accurate they found the results to be and how the results made them feel about themselves.

Students were then informed that participants would be placed in their interpersonal problem-solving sessions based on the results of the personality test. Half were informed they would meet with others who shared one of the traits they liked best in themselves (positive perceived similarity condition). The other half were informed they would meet with others sharing a trait they liked least in themselves (negative perceived similarity condition).

Perceived choice manipulation. Half the students were informed there were sufficient spaces for them to choose the session they would participate in (choice condition). Choice was limited to either selecting between two sessions

in which participants shared one of the respondent's most liked attributes or two in which they shared one of the respondent's least liked attributes. In an attempt to enduce psychological reactance, students in the no choice condition were informed that others who had signed up for the experiment earlier had been allowed to choose their session, but there were no longer enough open spaces to allow for this. They were then assigned to a session.

Categorization salience manipulation. Salience was manipulated by varying the visual presentation of information regarding the sessions, use of the words "group" and "session," and verbal statements by the experimenter regarding differences among the sessions. In the high salience condition, students were shown a computer print-out visually distinguishing 10 different groups (i.e., under the labels Group 1, Group 2, etc., randomly coded symbols were listed to give the appearance of distinct groups). The experimenter specifically referred to the various sessions as groups (cf. Billig & Tajfel, 1973) and stated that each group clearly differed from the others in terms of the members' common characteristic. In the low salience condition, respondents were not shown the computer print-out and the term "session" was used rather than "group." It was indicated that, while the respondent would be meeting with others who shared the designated trait, in general participants in all of the sessions scored quite similarly on the personality test. That is, it was pointed out that the various sessions did not differ greatly from one another.

Dependent Measure

The dependent measure consisted of a 14-item questionnaire, with responses to the items made on 6-point Likert scales. The first three items were included as checks of the three independent variable manipulations. The remaining 11 questions addressed the five dimensions of psychological sense of community listed earlier. Inter-item reliability coefficients were as follows: psychological sense of community (11 items), α = .71; desired interaction/commitment (3 items), α = .53; trust (2 items), α = .16; attraction (2 items), α = .60; assistance (3 items), α = .49. No coefficient was available for the belonging dimension as only one item was included to measure this.

RESULTS

Manipulation Checks

The effectiveness of the experimental manipulations was checked at two points. First, individuals' responses to results of the bogus personality test were obtained immediately after they received the results. No respondents reported the results to be inaccurate descriptions of their personality (81.3% stated that they felt the results accurately reflected their personality, 18.8%

said the results were somewhat accurate). With regard to the impact of the test results on respondents' feelings, 17.7% reported the results made them feel "kind of good" about themselves, 78.1% indicated they felt "no different than before," and 4.2% stated the results made them feel "kind of bad." Findings were consistent across all eight experimental conditions.

Checks of the experimental manipulations indicated that the three independent variables produced expected effects. Individuals in the choice condition reported experiencing more freedom in choosing a group than did those in the no choice condition, $F(1,94) = 43.05, p < .0001$. With regard to categorization salience, respondents in the high salience condition perceived their group as differing from other groups to a greater extent than did respondents in the low salience condition, $F(1,94) = 23.49, p < .0001$. Finally, while individuals in both the positive and negative shared attribute conditions perceived themselves as similar to others in their groups (means of 4.54 and 3.81, respectively, on a 6-point scale), perceived similarity was significantly greater in the positive shared attribute condition, $F(1,94) = 9.57, p < .003$.

Analysis of Hypotheses

All hypotheses were first analyzed using the sum of all 11 items related to psychological sense of community as a single dependent variable. Subsequent analyses were conducted using subtotals of items related to the five dimensions of psychological sense of community when appropriate. Cell means for

TABLE 1

MEAN PSYCHOLOGICAL SENSE OF COMMUNITY SCORES
AS A FUNCTION OF SHARED ATTRIBUTE, CATEGORY
SALIENCE, AND PERCEIVED FREEDOM OF CHOICE

Salience	Shared attribute	
	Positive	Negative
High		
Choice	50.33	41.33
No choice	49.16	46.00
Low		
Choice	50.58	47.16
No choice	48.66	43.41

Note. Minimum score = 11; maximum score = 66. n = 12 for each cell.

TABLE 2

ANALYSIS OF VARIANCE SUMMARY FOR PSYCHOLOGICAL SENSE OF
COMMUNITY AS A FUNCTION OF VALENCE OF SHARED ATTRIBUTE,
PERCEIVED FREEDOM OF CHOICE, AND CATEGORY SALIENCE

Source of variation	df	MS	F
Main effects			
Shared attribute	1	625.15	28.33***
Choice	1	1.36	0.06
Category salience	1	1.71	0.07
Two-way interactions			
Attribute X choice	1	34.93	1.52
Attribute X salience	1	4.35	0.19
Salience X choice	1	94.57	4.11**
Three-way interactions			
Attribute X choice X salience	1	72.67	3.16*

*$p < .08$.
**$p < .05$.
***$p < .0001$.

total psychological sense of community scores across the eight conditions are
reported in Table 1. Responses of males and females did not differ ($F = 0.47$).
Results of analysis of variance for main effects and interactions are presented
in Table 2.

Hypothesis 1. As predicted, respondents' psychological sense of community
varied as a function of the valence of perceived similarity. That is, individuals
sharing a positive attribute reported a higher psychological sense of community,
$\bar{X} = 49.68$, than did those sharing a negative attribute, $\bar{X} = 44.47$, $F(1,94) =$
27.41, $p < .0001$. Separate univariate analyses of variance revealed that this
difference was present for four of the five dimensions of psychological sense
of community, failing to occur only for the trust dimension (see Table 3).

Hypothesis 2. The predicted main effect for perceived freedom of choice
was not found, i.e., respondents in the choice and no choice conditions did
not differ in their reports of psychological sense of community. Data were
reanalyzed to examine the possibility that a main effect for perceived freedom
of choice was present independent of assignment to condition. Using the 6-point
manipulation check scale, respondents who marked either of the two scores
indicating the highest degrees of perceived freedom of choice ($n = 40$) were
compared with respondents who marked either of the two scores indicating
the lowest degrees of perceived choice ($n = 36$). These two groups differed

TABLE 3

ANALYSES OF VARIANCE: DIMENSIONS OF PSYCHOLOGICAL SENSE OF
COMMUNITY AS A FUNCTION OF VALENCE OF SHARED ATTRIBUTE[a]

Dimension	Source	df	MS	F
Interaction/commitment	Condition	1	66.67	15.07**
	Error	94	4.24	
Trust	Condition	1	5.04	1.79
	Error	94	2.82	
Liking/Attraction	Condition	1	45.38	32.04***
	Error	94	1.42	
Assistance	Condition	1	31.51	7.72*
	Error	94	4.08	
Belonging	Condition	1	6.51	12.98**
	Error	94	0.35	

[a]All scores reflect a greater psychological sense of community for positive
shared attribute groups than for shared attribute groups.
*$p < .01$.
**$p < .001$.
***$p < .0001$.

significantly, with respondents high in perceived choice reporting greater psycho-
logical sense of community ($\overline{X}$ = 48.88) than respondents low in perceived
freedom of choice ($\overline{X}$ = 45.31). This effect was supported by the results of
both analysis of variance, $F(1,74) = 8.71$, $p < .005$, and the more conservative
Sheffe' *post hoc* analysis ($p < .05$).

An unanticipated interaction between perceived freedom of choice and
categorization salience also emerged (see Table 2). The mean scores reflective of
this interaction indicate that perceived choice enhanced psychological sense of
community under low salience and had the opposite effect under high salience.

Hypothesis 3. The predicted interaction between categorization salience
and valence of perceived similarity was not found. However, a trend toward
a significant three-way interaction was found, $F(1,94) = 3.16$, $p < .08$. As a
result, the simple interaction effects of categorization salience and valence
of perceived similarity were examined. Results indicate a significant salience $\times$
similarity interaction occurred in the choice condition, $F(1,46) = 4.17$, $p < .05$,
but did not occur in the no choice condition. That is, in the choice condition,
the differing levels of categorization salience had no effect on psychological
sense of community of groups sharing a positive attribute, $\overline{X}$ = 50.33 vs. $\overline{X}$ =
50.58, while among the groups sharing a negative attribute high categorization

salience led to lower psychological sense of community than low categorization salience, $\overline{X}$ = 41.33 vs. $\overline{X}$ = 47.16, respectively.

DISCUSSION

This initial investigation of psychological sense of community has provided support for the adequacy of such a construct and for the use of questionnaire items as a measurement device. An examination of the inter-item reliability figures indicates that, except for the "trust" dimension, respondents used the items in roughly the expected fashion. The observed relationships among the responses reflect the findings obtained by Brim (1974) in a natural setting.

In summary, the results indicate that psychological sense of community differs among individuals and varies as a function of situational factors. Specifically, support was found for the hypothesis that perceived similarity with others in one's group on a negative interpersonal trait produces less psychological sense of community than perceived similarity on a positive interpersonal trait. Perceived freedom of choice in selecting a group did have the hypothesized effect on psychological sense of community, with individuals high in perceived choice experiencing greater psychological sense of community than those low in perceived choice. The strength of this effect is weakened by the fact that it occurred independent of assignment to condition. The hypothesis that the valence of perceived similarity would interact with categorization salience also received partial support. That is, when respondents were allowed some degree of choice in selecting their group, high categorization salience did not affect psychological sense of community among those sharing a positive attribute but decreased it among those sharing a negative trait. The findings have relevance for both intragroup relations and work with populations in treatment settings.

Implications for Intragroup Relations

The present findings are valuable for understanding relationships among individuals in groups. It is instructive to examine the impact of each independent variable on intragroup relations, particularly in light of previous experimental findings.

Perceived similarity. The observed main effect for valence for perceived similarity provides further support for previously reported effects relating perceived similarity with a negatively labeled other to reactions of avoidance and dislike (e.g., Taylor & Metee, 1971). The methodology used in the present experiment and utilization of psychological sense of community as a dependent measure clarify and expand previous findings. Members of groups sharing negative interpersonal characteristics, compared with those sharing positive traits,

reported less desire to interact with members of their groups, less liking toward them, expected to receive and offer less help, and to feel less included.

Evidence from this study indicates that the mechanisms suggested by others to account for this effect may be inadequate. Both Novak and Lerner (1968) and Taylor and Metee (1971) infer that it is respondents' *fear* that they might possess the negative characteristic which leads to reactions of avoidance and derogation to reduce their fear. The present study, on the other hand, replicated this effect in a context in which individuals had indicated that the negative characteristic was one which they possessed and disliked in themselves prior to any knowledge that they would be asked to interact with others who also possessed the trait. Individuals could not have feared that they might possess the trait, having already disclosed it was a part of their personality. Therefore, it is suggested that the mediating process may be more akin to an attempt by respondents to maintain cognitive consistency or balance (e.g., Heider, 1958; Newcombe, 1953). If one dislikes something in one's self, then congruence can only be achieved by disliking the same trait in another individual.

The check of the perceived similarity manipulation is also interesting in this context. While mean scores indicate that respondents in both conditions perceived themselves as similar to others in their group, that effect was significantly stronger for those in the positive shared attribute condition. This occurred even though both the positive and negative attributes were identified as characteristics which they "liked most" and "liked least" about themselves. Whether this indicates an attempt by respondents to distance themselves from others in their group or an effort to deny association with this trait in the eyes of the experimenter is unclear. The second explanation seems particularly unlikely, however, as the experimenter provided respondents with the feedback that they scored highly on these traits on the personality test.

Perceived freedom of choice. The hypothesized main effect for perception of choice received partial support. While individuals in the choice condition and no choice condition did differ significantly in their sense of choice in selecting a group, their reported psychological sense of community did not differ. However, examination of responses of individuals highest and lowest in perceived choice on the choice manipulation check indicates these groups differed in psychological sense of community, with high choice leading to high psychological sense of community. This result indicates that perception of choice may have been influenced in unexpected ways by individual differences among the respondents.

Additionally, respondents in the no choice condition may have failed to experience the expected degree of psychological reactance. Difficulties in generating psychological reactance in a therapy analogue context have been discussed by Harris and Harvey (1978). These authors suggest that it is necessary to induce an initial sense of choice and subsequently eliminate one or

more of the respondent's possible behaviors in order to produce reactance. While an attempt to do this was made in the present procedure, the manipulation may not have been sufficient to generate psychological reactance in respondents in the no choice condition.

Categorization salience. While the hypothesized interaction between categorization salience and perceived similarity was not found, that interaction did occur in the choice condition. Within this context, members of groups sharing a negative attribute reported less psychological sense of community when they perceived a large degree of difference between their group and other groups than when a small degree of between group differences was perceived. Interpretations of this limited finding must be made with the caution that further investigation is necessary to understand why it failed to occur in the no choice condition. It is possible, for example, that respondents in the choice condition spent more time "considering" the various groups which enhanced the differences between the groups (cf. Harvey & Johnston, 1973). This could then lead to a stronger salience effect for individuals in the choice condition.

In the absence of conclusive findings, these results are still useful in indicating the potential importance of the construct of categorization salience for understanding intragroup phenomena. For work related to this construct to have meaning in real world contexts, the effects of categorization must be examined in relation to groups which differ in value or attractiveness for their members, as the effect observed in the present investigation runs counter to that reported with neutrally labeled groups (i.e., salience adversely affected attitudes toward ingroup members). This means that such endeavors will most likely emphasize interactive effects of category salience rather than main effects in isolation.

Implications for Clinical Populations and Treatment Settings

The present findings also provide an initial understanding of psychological sense of community under conditions found in treatment groups and settings. Under circumstances such as these, effects of perceived similarity on a negative trait may be broader than suggested by previous investigations. While differences between positive and negative perceived similarity groups were greatest on the dimensions of liking/attraction and desired interaction/commitment, the groups also differed on the dimensions of assistance and belonging (see above). The tendency to see others as less helpful and the decreased desire to provide help to others are of potentially great concern in a treatment context.

The interaction between valence of perceived similarity and categorization salience may also be valuable to investigate with individuals in treatment settings. The effect was observed here under a very slight manipulation of the salience variable. Boundaries between members of treatment groups and non-group members in clinical contexts would probably be much more dramatic. For

example, there is the physical separation of many treatment settings from the surrounding community, dressing psychiatric patients in "institutional garb," and the use of specific labels for members of treatment groups. These factors should dramatically enhance salience of between group differences.

Finally, the experience of being allowed to choose a treatment group or setting may have positive consequences for subsequent psychological sense of community among the participants. This effect is consistent with reports of increased effectiveness of behavior change programs for individuals who perceived that they were given a choice of procedures (Kanfer & Grimm, 1978) and the observed increase in well-being of institutionalized individuals as a result of increased choice and responsibility (Langer & Rodin, 1976).

Of course, the present study represents only an analogue of research which needs to be carried out. As discussed above, psychological sense of community is thought to exist among individuals in their ongoing, day-to-day interpersonal relationships (Sarason, 1974). The refinement of measurement techniques for assessing the construct, in combination with established indicators of social networks, is needed as a basis for a multimethod approach to field investigations.

More generally, the present investigation has provided a valuable integration of two previously independent areas of research, community psychology and experimental social psychology. The results indicate that some of the complex situational and psychological variables which have concerned community psychologists may gain added conceptual clarity from investigation under controlled laboratory conditions. At the same time, the types of questions addressed by community psychology may provide a rich opportunity to examine the external validity of many of the phenomena studied by social psychologists.

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