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ABSTRACT

Generally, role-taking research has focused on the development and correlates of role taking in children. To explore role taking in the relatively overlooked population of young adults, a sociometric instrument, the Peer Role-Taking Questionnaire (PRTQ), was developed and used to measure perceived role-taking behaviors. The results were compared to those of a projective role-taking measure, the Role-Taking Task (RTT). The final sample consisted of 78 fraternity and sorority members, who also completed the Personality Research Form (PRF). Results showed that PRTQ scores correlated with sociometric/demographic measures of friendship, cooperation, class year, and group status. In contrast, RTT scores correlated with personality measures and college grade point average. Furthermore, the PRTQ and RTT were not shown to correlate. The findings appear to question the value and purpose of nonecological instruments which propose to measure a social reality. (Author/JAC)

Perceived Role-Taking Behavior and Role-Taking Test Performance in Fraternity and Sorority College Students

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Perceived Role-Taking Behavior and Role-Taking Test Performance in Fraternity and Sorority College Students

The past decade has evidenced a considerable amount of research devoted to the examination of role-taking skills. Role taking is a set of skills which enable the individual to consider another person's point of view. Generally, role-taking research focuses on the development and correlates of role taking in children. This study was designed to explore role taking in the relatively overlooked population of young adults.

The concept of role taking is rooted in the early works of Mead (1934) and Piaget (1977). Mead posited that effective social interaction and communication is mediated by one's ability to take the role of the "other". In contrast, Piaget viewed role taking mainly within a cognitive, rather than a social, framework. He conceptualized role taking, or the ability to decenter, as an integral part of cognitive development.

Although the importance of role-taking skills has been recognized, the tasks used to assess role taking are primarily measures of the cognitive ability needed to complete the particular tasks, which may or may not be related to real-life role-taking behavior. Furthermore, the validity of widely used role-taking measures has been seriously questioned (Kurdek, 1977; Rubin, 1978).

Role-taking measures used in research on children are generally not applicable to adult subjects because they are too easy. However, one task has been used with adults: Feffer's Role-Taking Task (RTT) (Schnall and

Feffer, undated). This task is a projective one in which the subject views three picture cards. For each picture, the subject is asked to tell stories about the pictures and then retell them from the perspective of each of the characters in the pictures.

The RTT was originally developed as a measure of cognitive development. Adult RTT performance had been shown to be associated with various developmental indices of the Rorschach (Feffer, 1959), with motivational need hierarchies (Gourevitch and Feffer, 1959), and with thinking processes (Wolfe, 1963). The author extended its use to children and claimed that it was also related to performance on some Piagetian decentration tasks (Feffer and Gourevitch, 1960). The correlations between these tasks and the RTT were interpreted as providing construct validation for the RTT as a measure of perspective taking or role taking.

Turnure (1975) investigated social role taking (as she referred to it) in 60 seven-to twelve-year-olds. She found that the RTT was highly related to IQ, a relationship also documented by Keller (1976), but unrelated to two Piagetian decentration tasks. This evidence cast doubt on the RTT's original claim for construct validity, but supported its place as a cognitive measure.

In a sample of 96 first through fourth graders, Kurdek (1978) discovered that the RTT displayed the poorest internal consistency (r = .40) of four widely used role-taking tasks. Furthermore, the RTT significantly correlated with only two of the other three tasks when the effects of age and cognitive functioning were partialled out.

For these reasons, this study has attempted to identify individuals who are perceived by their peers as exhibiting various degrees of role-taking behavior. Sociometrically identifying their perceived behavior, as

opposed to test performance, can be an ecologically valid way of measuring a construct (Babad, 1974).

When one tests subjects to study their behavior, without considering their interpersonal interactions and perceptions of their social environment, one also overlooks the social context which ultimately impacts these individuals and their behavior. Thus, one purpose of this study is to look at the social reality of role taking and compare it to role-taking test performance.

Method

Subjects

Intact groups of subjects were needed for sociometric assessment. Members of six undergraduate fraternities and three undergraduate sororities at the Towson State University in Towson, Maryland, served as the source of subjects. These nine groups consisted of 236 active members, 167 of whom completed a sociometric measure and were considered the preliminary sample. Later, 125 of the 236 were randomly selected to participate further. A final sample included 78 of the 125.

The final sample was almost evenly split with respect to sex (49% male, 51% female). The combined verbal and math Scholastic Aptitude Test (SAT) scores for this group ranged from 530 to 1200 with a mean of 927. The overall college grade point average (GPA) was in the C^+ range.

Materials

Peer Role-Taking Questionnaire (PRTQ) (Table 1). The PRTQ includes 10 items or descriptions of role-taking behavior. The purpose of the PRTQ was to survey the preliminary sample subjects as to which of their fellow group members they perceived as high role takers. It asked them to

name or nominate one person who is most like each of the presented descriptions.

Insert Table 1 about here

For every member in each fraternity/sorority group, a role-taking score was derived by using the completed items on each PRTQ. There are ten possible items. A raw score is arrived at by counting the number of times a group member is identified on any completed item on any questionnaire. The raw score range varies across groups depending on the number of group members and the number of PRTQ returns.

To make scores comparable across groups, the raw scores within a group were converted to standard scores by using the mean and standard deviation of the respective group. For data analyses, only those scores of members who consented to participate (N = 167) were used.

Table 2 presents analyses of the PRTQ's interrater reliability. Analyses of variance resulting in intraclass correlations were computed as described by Guilford and Fruchter (1978). Here, raters, or preliminary subjects, are considered treatments, and ratees are the group members.

Insert Table 2 about here

Analyses of variance were performed for each group. As expected, there were no significant differences among raters, indicating the consistency of peer judgements. Also as expected, there were significant differences among ratees, suggesting the individual variation of role-taking behavior. Overall, the intraclass correlations, representing the

reliability of ratings, were high, ranging from .85 to .99.

A principal components factor analysis with varimax rotation was executed, using the preliminary sample (N = 167), to determine the consistency of the PRTQ's 10 items. Only one factor, with an Eigenvalue of 4.17, was evidenced, providing strong support for the representation of a general role-taking factor. Factor loadings ranged from .49 to .77.

Test-retest reliability data, available from a pilot study of other Towson State University students, provided a Pearson r of .91 (N = 12; $p < .005$, one-tailed). The validity of the PRTQ was also demonstrated in this pilot study. Members of this surveyed group were being trained in helping and interaction skills by two counselors at the Towson State University Counseling Center. These counselors were asked to name two trainees who displayed the greatest role-taking skills and two who displayed the least. Their judgements coincided perfectly with the PRTQ results.

Role-Taking Task (RTT) (Schnall & Feffer, undated): This is a projective-like task in which the subject is first asked to create a story about each of three pictures, although fewer have been employed (Feffer, 1959; Feffer & Suchotliff, 1966). Next, the subject is again shown the three pictures, in the same order, but is asked to retell the initial stories from the points of view of each of the characters in the pictures. In the present study, three Thematic Apperception Test (TAT) cards were used; 2, 4, and 7GF.

The overall score is based on the extent "to which the subject is able to refocus upon his initial story from the perspective of (the) characters while at the same time maintaining continuity between his various versions of the initial story" (Feffer & Suchotliff, 1966, p. 416).

The detailed and somewhat complex scoring technique is described elsewhere (Schnall & Feffer, undated). Overall, there are 20 levels of role taking. The higher the level achieved, the greater the subject's role-taking skills. For each character on each of the three cards presented, one level of role taking was recorded. Then, for each card, the highest character level achieved represented a subscore. Thus, there were three subscores for each subject. For scoring purposes, the three subscores were averaged, as done by Feffer and Gourevitch (1960), to arrive at one RTT score.

The written protocols of 20 subjects were randomly chosen and scored by the experimenter and a trained rater. A Spearman rank-difference correlation was calculated to determine interrater reliability: ρ = .85. An analysis of variance was performed and intraclass correlations were computed for 25 randomly chosen protocols. There were no significant differences among subjects' performances on the three cards (F (2,48) = .13, $p > .05$). An intraclass correlation was computed to determine the reliability of the average scores of all three cards (see Guilford & Fruchter, 1978), r_{II} = .58. It compared favorably with another internal consistency reliability demonstrated by Kurdek (1977) (r = .40, for N = 16).

Personality Research Form (PRF) (Jackson, 1968). This is a self-report personality inventory designed for college students. Short Form A containing a total of 15 scales (affiliation, nurturance, aggression, achievement, autonomy, dominance, endurance, exhibition, harm-avoidance, impulsivity, order, play, succorance, understanding, and one scale tapping response style and bias) was used.

For Form A, a Kuder-Richardson coefficient of .76 and an odd-even reliability of .78 are reported (Kelly, 1972). With respect to validity, the PRF exhibited median r s of .52 and .56 for peer ratings and self-ratings, respectively (Anastasi, 1972). Also, a multimethod factor analysis revealed that the trait factors which emerged "correspond so closely with the original trait scores as to provide good evidence of both convergent and discriminant validity" (Anastasi, 1972, p. 298). Overall, this instrument has received favorable reviews (see Buros, 1972).

Data Sheet. The preliminary and final sample subjects were asked to complete a form requesting the following information: name, fraternity/sorority, age, birthdate, class year, and past/present group status. Past/present group status represented whether or not they had been elected officials in their group (e.g. president, treasurer).

Name/Number Sheet. Each fraternity/sorority member who completed a PRTQ did so by listing code numbers instead of names. This procedure enabled easier scoring and greater anonymity.

Procedure

The Data Sheet, PRTQ, and Name/Number Sheet were distributed by the experimenter or one of four research assistants and completed during fraternity/sorority meetings. A total of 236 PRTQ scores were computed, one for each group member, although only the scores of the 167 consenting subjects were used for analysis.

In addition to the PRTQ, subjects were asked to nominate members who fit two other descriptions: persons whom they considered their good friends and persons whom they would choose as roommates or partners in a course project. The first description provided a sociometric measure of friend-

ship and the second of cooperation. These scores were computed in the same manner as the PRTQ score (see Materials).

For the final sample, 125 members were randomly selected from the 236 in the nine groups and sent letters apprising them of the research being conducted. Subjects were then contacted by phone, mail, or through fraternity/sorority officials for their participation. Final subjects were individually tested during sessions which lasted no less than 80 minutes and no more than 120 minutes. During these sessions they completed the RTT.

Subjects wrote their stories as in Feffer and Suchotliff (1966). The order of presentation of the TAT cards was constant for all subjects: Card 4 (male, then female character), Card 7GF (older woman, then girl), and Card 2 (woman on left, woman on right, then male in background).

Results

To further investigate the PRTQ's validity as a role-taking measure, a second principal components factor analysis with varimax rotation was conducted. The purpose of this analysis was to determine whether the PRTQ measured something other than popularity or friendship. This analysis included the 10 PRTQ items scores[1], and the measures of cooperation, friendship, group status, and class year. It used only the preliminary sample subjects so that a large enough sample size could be maintained.

Table 3 shows that only one of the three factors generated displayed an Eigenvalue of greater than 1 (Eigenvalue = 5.27). For this factor, loadings greater than .40 were exhibited only by PRTQ items. Hence, this factor is titled the Role-Taking Factor.

Insert Table 3 about here

Friendship and group status loaded poorly on the Role-Taking Factor. Cooperation displayed a factor loading of .39, nearing the .40 cutoff for significant factor loadings.

The PRTQ and RTT associations are displayed in Table 4. PRTQ scores correlated positively with the sociometric measures of cooperation and friendship. Two demographic indices, class year and group status, were also positively associated with the PRTQ measure. Because these two variables were categorical in nature, statistics in addition to the Pearson r were computed. A one-way analysis of variance of PRTQ by class year was significant ($F(3, 166) = 3.25$, $p < .02$). The dichotomous group status measure exhibited a significant t ($t(76) - 3.0$, $p < .01$).

Insert Table 4 about here

Because the RTT score is a ranking, Spearman rank-difference correlations were computed. The RTT was associated with a cognitive measure, G.P.A., and various other personality test measures. The PRTQ measure of perceived role-taking behavior did not correlate with the RTT measure of role-taking test performance. RTT correlations were less in magnitude than those of the PRTQ.

Discussion

Support for the RTT as a social measure was unavailable in the present study. It did not correlate with other social/demographic measures, as did the PRTQ. This may be partially explained by method variance in that the PRTQ and not the RTT was more likely to be associated with other sociometric measures. Yet, the RTT did not correlate with group status and class year, as did the PRTQ.

It makes sense that perceived role-taking behavior was associated with class year and group status. Thus, seniors tended to be seen as higher role takers than freshmen or sophomores. This finding fits in nicely with the observation that college students come in contact with diverse opinions, attitudes, values, and behaviors. Perry (1968) documented this kind of intellectual and moral development in college students. In their coursework, students are reinforced to experience learning by considering alternative perspectives. In a sense, they are encouraged to sharpen their role-taking skills.

The relationship demonstrated between the PRTQ and group status suggests that those fraternity/sorority members who had occupied elected official positions in their groups were also those who were viewed as high role takers. In this case, students who were elected to lead, represent, and serve their fellow students were also those who were seen as being able to understand other persons' points of view. One would obviously prefer a fraternity or sorority president who could be sensitive to his/her members' needs.

Interestingly, the PRTQ measure was not associated with the RTT score. Here, a cognitive measure of a social phenomenon was pitted against a sociometric, ecological one; ecological in the sense that it represents the social reality of role taking.

The RTT's place as a cognitive measure was somewhat supported here by its significant correlation with GPA. Ironically, the RTT asks the individual to role take him/herself. There is no real other perspective. All perspectives are one's own: the individual generates or projects various points of view and then role takes them. Since the other points of

view are really one's own, how can this be role taking?

The RTT assumes that performing well on a projective, cognitive task implies successful communication and social role-taking (Feffer & Suchotliff, 1966; Turnure, 1975). Its validity as a role-taking instrument lies on this assumption, namely that successfully thinking about role taking when asked to is much like spontaneously acting as a successful role taker.

The PRTQ assumes a shorter jump from perception of role-taking behavior to role-taking behavior proper. It relies on the recalled observations of peers who know the individual well. Others may give a more objective, accurate assessment of role-taking behavior than oneself. Furthermore, not one but a number of these others are asked to recall their observations. The reliability of these judgements is evident from their strong agreement.

One might argue that the perceptions gathered here are not indicative of real-life behavior. Yet, perceptions of the environment are what make up the social reality; they are what is considered real. Perceptions are perhaps the most valid, representative indicators of the psychological/interpersonal world. They are what motivate our behavior (Bronfenbrenner, 1977).

The present findings necessitate implications for the development of more ecologically valid instruments, questioning the value and purpose of nonecological instruments which propose to measure a social reality. Future instruments might well focus on the direct measurement of observable behavior. Such valid measures are desparately needed.

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Footnotes

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[1] Item scores were computed in the same manner as the overall PRTQ score. For each item, a raw score was arrived at by counting the number of times a group member was nominated on that item, in that group. To make scores comparable across groups, the raw scores were converted to standard scores based on the mean and standard deviations of each group.

Table 1

Peer Role-Taking Questionnaire

The following questionnaire asks you to look at the behavior of your fellow fraternity/sorority members. Answer it as honestly as you can. All the information you give will be used for research purposes and will remain confidential. Please return this questionnaire to Mrs. R. Moser, Glen Esk, Counseling Center.

INSTRUCTIONS

A. For each description below, fill in the person in your fraternity or sorority who is MOST LIKE the description.

B. You may list a person repeatedly, as many times as you wish.

C. Do not include yourself as any of the answers.

D. Do not include anyone outside the fraternity/sorority.

I. A member who when involved in an argument is the type of person who will consider and take into account the other person's point of view and compare it with his/her own. _____

II. A member who, when not involved in an argument, can help the arguers stop fighting by understanding each person's point of view. _____

III. A member who seems to be able to figure out how his or her friends will react in any type of situation. _____

IV. A member who seems to have a keen sense about what teachers expect from their students. _____

V. A member who seems to be able to predict how his or her friends will feel when they hear bad news. _____

VI. A member who is good at understanding people's problems. _____

VII. A member who not only listens to what others say but understands what they say. The type of person who "knows where you're coming from." _____

VIII. A member who seems to know how others feel. _____

IX. A member who can anticipate what others will do or say. _____

X. A member who can accurately compare his/her point of view with that of others. _____

Table 2

Analyses of Variance: Reliability of PRTQ Raters

Group	Source	df	Mean Square	F	p	r_I^a	r_{II}^b
1	Ratee (rows)	23	64.56	9.79	.005	.89	.99
	Rater (columns)	17	.22	.50	.95		
	Remainder (rows x columns)	391	.44				
2	Ratee	14	46.67	16.85	.001	.91	.98
	Rater	6	.00	.00	1.00		
	Remainder	84	.72				
3	Ratee	13	76.91	19.41	.001	.90	.99
	Rater	11	.29	.42	.94		
	Remainder	143	.69				
4	Ratee	32	69.70	24.28	.001	.85	.99
	Rater	22	.01	.02	1.00		
	Remainder	704	.55				

Table 2 (Continued)

Group	Source	df	Mean Square	F	p	r_I[a]	r_{II}[b]
5	Ratee	21	37.64	18.88	.001	.86	.98
	Rater	9	.20	.30	.97		
	Remainder	189	.65				
6	Ratee	43	87.30	24.98	.001	.87	.99
	Rater	36	.03	.09	1.00		
	Remainder	1548	.36				
7	Ratee	32	61.83	20.13	.001	.87	.99
	Rater	20	.00	.00	1.00		
	Remainder	240	.46				
8	Ratee	30	57.42	26.65	.001	.86	.99
	Rater	17	.00	.00	1.00		
	Remainder	510	.53				

Table 2 (Continued)

Group	Source	df	Mean Square	F	p	r_I^a	r_{II}^b
9	Ratee	22	54.93	29.79	.001	.87	.99
	Rater	13	.15	.24	1.00		
	Remainder	286	.62				

a. $r_I = \frac{MS\ (raters) - MS\ (remainder)}{MS\ (ratees) + (K-1)\ MS\ (remainder)}$ = typical reliability of a single rater's ratings

where K is equal to the number of raters.

b. $r_{II} = \frac{MS\ (ratees) - MS\ (remainder)}{MS\ (ratees)}$ = overall reliability of ratings in the group.

Table 3

Rotated Factor Matrix: PRTQ Items, Friendship, Cooperation, Class Year, and Group Status

(N = 167)

Measure	Factor 1	Factor 2	Factor 3
Friendship	.27	.08	.86
Cooperation	.38	.40	.44
Class Year	.08	.33	.05
Group Status	.08	.36	.20
Item 1	.65	.39	.13
Item 2	.69	.37	.10
Item 3	.46	.32	.32
Item 4	.23	.64	.03
Item 5	.62	.22	.28
Item 6	.61	.24	.19
Item 7	.70	.07	.21
Item 8	.50	.42	.07
Item 9	.27	.46	.21
Item 10	.38	.69	.01
Eigenvalue	5.27	.85	.54
Percentage Variance	38%	6%	4%
Cumulative Percentage Variance	38%	44%	48%

Table 4

Correlates of the Peer Role-Taking Questionnaire (PRTQ)

and the Role-Taking Task (RTT)

(N = 78)

	Measures	Correlations	Measures	Correlations
PRTQ	Cooperation	r = .67***		
	Friendship	r = .46***		
	Class Year	r = .37***	Endurance	r = .22*
	Group Status	r = .33**		
RTT	Grade Point Average	ρ (rho) = .24*	Dominance	ρ (rho) = -.30**
			Nurturance	ρ (rho) = .25**
			Exhibition	ρ (rho) = -.23*
			Succorance	ρ (rho) = -.19*

*$p < .05$

**$p < .01$

***$p < .001$