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ABSTRACT

Although inquiries into social status have enjoyed increasing popularity in the literature, peer nomination techniques reveal little about the determinants of social preference. This study examined the relationship between two sociometric measures in predicting five categories of social status: (1) Popular; (2) Neglected; (3) Rejected; (4) Controversial; and (5) Average. The study's purpose was to determine whether broad-band peer behavior ratings might provide further information on factors influencing social status. The two measures used were the Pupil Evaluation Inventory (PEI) and the Peer Nomination Technique (PNT). The PEI assesses aggression, withdrawal, and likability while the PNT asks to students to assign their peers to one of the five social status categories listed above. A total of 223 5th- and 6th-grade students in 5 elementary schools participated. Behavior ratings results from the PEI provided a moderate predictor of Social Preference as indicated by the PNT. Although the relationships between the PEI and the PNT were found to be moderate, three conclusions could be drawn: (1) the convergence of detailed behavior ratings on more global nominations of likes and dislikes can reveal information on these determinants; (2) the continued use of the PEI is supported by the results; and (3) research into peer ratings, in general, merit further attention. Three tables presenting statistical analysis are appended. (RJM)

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Peer Behavior Ratings as Predictors of Sociometric Status

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The purpose of this study was to examine the relationship between two sociometric measures (i.e., **Pupil Evaluation Inventory [PEI]** and the **Peer Nomination Technique [PNT]**), in predicting social status, in five categories: Popular, Neglected, Rejected, Controversial and Average.

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Previous studies have examined the discriminant validity of peer behavior ratings with indicators of school achievement, special education placement, parent and teachers ratings of social skills and behavior problems (Maag, Vasa, Reid, & Torrey, 1995). In particular, peer ratings have been studied in conjunction with peer nominations, revealing a logical pattern of convergent validity (Wright, Torrey, Maag, & Vasa, 1995). Although social status has enjoyed increasing attention in the literature on social skills and behavior problems, peer nomination techniques reveal little about the determinants of social preference. The purpose of this study is to determine whether broad band peer behavior ratings might provide further information on these determinants.

METHODS

Instrumentation

The PEI (Pekarik, Prinz, Liebert, Weintraub, & Neal, 1976), is a 35-item sociometric measure that uses both peer ratings and peer-nomination techniques. Three factors included in the measure are: aggression (i.e., classroom disruptiveness, physical aggression, attention seeking, etc.), withdrawal (i.e., social withdrawal, shyness, over sensitivity, etc.), and likability (popularity, social competence, etc.).

PNT is the sociometric component of the **Behavior Rating Profile (BRP)** (Brown & Hammill, 1978). Students are asked to nominate three classmates by responding to two questions. (a) Which of the girls and boys in your class would you most like to have as your friend? and (b) Which of the girls and boys in your class would you least like to have as your friend? Coie, Dodge, & Coppotelli (1982) derives Social Preference and Social Impact scores and assigns students to the social status categories of Popular, Neglected, Rejected, Controversial, and Average.

Subjects

A total of 223 fifth- and sixth-grade students in 12 fifth and sixth grade classrooms in five elementary schools comprised of one rural and one suburban school district in the midwest were included in the study.

Procedures

Each subject (223) was administered both the PEI and PNT following a standardized set of instructions. Their PEI scores were analyzed using a stepwise multiple regression to determine their efficacy in predicting the PNT summary scores, and a classification analysis was performed to determine the accuracy with which the PEI could discriminate among categories of social status (i.e., popular, neglected, rejected, controversial and average) yielded by the PNT.

RESULTS

Table 1 presents the results of the stepwise multiple regression of PEI variables (likability, aggression and withdrawal) toward two PNT scores (social preference and social impact), to determine their efficacy in predicting the PNT summary scores. All three scores from the PEI contributed to the first regression equation, yielding a Multiple R .68 toward social preference and .44 toward Social Impact.

Table 2 presents the results of the discriminant analysis. The PEI variables contributed significantly to three discriminant functions and predicted group membership with moderate accuracy.

Table 3 provides means of Aggression, Withdrawal, and Likability scales of the PEI with variables for five social status groups (i.e., rejected, neglected, controversial, average, and popular), as well as those unclassified using the PNT .

DISCUSSION

Behavior ratings results from the PEI provided a moderate predictor of Social Preference as indicated by the PNT, accounting for just under one half of the variance in that derived rating (46%). The PEI provided a less accurate predictor of the Social Impact score, however, accounting for only 19% of the variance. The PEI variable fared unevenly in predicting the social status categories generated by the PNT. Although the overall accuracy of prediction toward group membership was only 28.7%, prediction was much more accurate toward specific groups, such as Rejected (51.5%), Neglected (60%) and Popular (67.9%). Substantially less accuracy was observed in prediction of Controversial (25%), Average (14.8%), and those students who remained unclassified by the PNT algorithms (16.4%).

Although the relationships between the PEI and the PNT are moderate, they do offer some useful information. 1.) The convergence of fairly detailed behavior ratings on more global nominations of likes and dislikes can reveal information on these determinants, 2.) The continued use of the PEI is supported by these results, and 3.) Research into peer ratings in general merit further attention.

References

Brown, L. L. & Hammill, D. D. (1978). The Behavior Rating Profile: An ecological approach to behavioral assessment. Austin, TX: Pro-Ed.

Coie, J. D., Dodge, K. A. & Coppotelli, H. (1982). Dimensions and types of status: A cross-age perspective. Developmental Psychology, 18, 557-570.

Maag, J.W., Vasa, S. F., Ried, R., & Torrey, G.K. (1995). Social and behavioral predictors of popular, rejected, and average children. Educational and Psychological Measurement, 55(3), 196-205.

Pekarik, E. G., Prinz, R. J., Liebert, D.E., Weintraub, S., & Neal, J. M. (1976). The Pupil Evaluation Inventory: A sociometric technique for assessing children's social behavior. Journal of Abnormal Child Psychology, 4, 93-97.

Wright, D., Torrey, G. K., Maag, J. W., & Vasa, S. F. (1995). A comparison of two sociometric techniques with parent and teacher ratings of social skills and problem behaviors. Paper presented at the National Association of School Psychologists Annual National Convention, Chicago, Illinois.

Table 1

**Stepwise Multiple Regression of PEI Variables
Toward Two PNT Derived Scores**

A) Social Preference

<u>Variable</u>	<u>B</u>	<u>SE B</u>	<u>Beta</u>	<u>T</u>	<u>Sig. T</u>
Likability	.0352	.0035	.5148	10.087	.0000
Aggression	-.0266	.0039	.3380	-6.773	.0000
Withdrawal	-.0046	.0022	-.1060	-2.094	.0374
(Constant)	-.3646	.1140		-3.200	.0016

Multiple R = .680

R Square = .462

Adjusted R Square = .454

Standard Error = .724

B) Social Impact

<u>Variable</u>	<u>B</u>	<u>SE B</u>	<u>Beta</u>	<u>T</u>	<u>Sig. T</u>
Aggression	.0333	.0047	.4230	7.015	.0000
Withdrawal	.0053	.0026	.1237	2.052	.0413
(Constant)	-.4942	.0895		-5.521	.0000

Multiple R = .444

R Square = .197

Adjusted R Square = .190

Standard Error = .881

Table 2**Results of Discriminant Analysis**

Standard canonical discriminant function coefficients.

	<u>Function 1</u>	<u>Function 2</u>	<u>Function 3</u>
Aggression	-.5817	.7217	-.3787
Likability	.7964	.6233	.0393
Withdrawal	-.1656	.4004	.9150

Classification Results

<u>Actual Group</u>	<u>No. of Cases</u>	<u>Predicted Group Membership</u>					
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Group 1 Rejected	33	17 <u>51.5%</u>	12 36.4%	2 6.1%	1 3.0%	1 3.0%	0 .0%
Group 2 Neglected	5	0 .0%	3 <u>60.0%</u>	2 40.0%	0 .0%	0 .0%	0 .0%
Group 3 Unclassified	61	4 6.6%	18 29.5%	10 <u>16.4%</u>	5 8.2%	5 8.2%	19 31.1%
Group 4 Average	88	3 3.4%	32 36.4%	11 12.5%	13 <u>14.8%</u>	17 19.3%	12 13.6%
Group 5 Controversial	8	3 37.5%	2 25.0%	0 .0%	0 .0%	2 <u>25.0%</u>	1 12.5%
Group 6 Popular	28	0 .0%	3 10.7%	3 10.7%	1 3.6%	2 7.1%	19 <u>67.9%</u>

Table 3

Means of PEI Variables for
PNT Status Categories

<u>PNT Category*</u>	<u>Aggression</u>	<u>Withdrawal</u>	<u>Likability</u>
Rejected (33)	23.63	22.09	9.17
Neglected (5)	9.44	11.35	15.59
Unclassified (61)	9.31	12.34	25.43
Average (88)	12.48	7.09	19.86
Controversial (8)	21.45	8.73	19.20
Popular (28)	10.03	4.29	35.52
All Groups (223)	13.15	10.52	21.64