
OBJECTIVES OF THE STUDY WERE TO: (1) DEVELOP A RELIABLE INSTRUMENT TO EVALUATE THE CONSULTATION PROCESS; (2) ADMINISTER THE SURVEY INSTRUMENT TO A SAMPLE OF 116 ELEMENTARY AND MIDDLE SCHOOL TEACHERS; AND (3) INTERPRET TEACHERS' PERCEPTIONS DESCRIPTIVELY AND FACTOR ANALYTICALLY. DESCRIPTIVE INTERPRETATION OF THE TEACHERS' RESPONSES ON THE EVALUATION SURVEY REVEALED MANY INTERESTING FINDINGS, INCLUDING THE NEED FOR BETTER TIME MANAGEMENT AND PERSONAL COMMUNICATIONS AMONG SCHOOL PSYCHOLOGISTS AND TEACHERS DURING CONSULTATION. RELIABILITY ANALYSIS ON THE INSTRUMENT REVEALED A STRONG ALPHA COEFFICIENT (0.93) IN ITS INITIAL DEVELOPMENT, INDICATING PROMISING PSYCHOMETRIC STRENGTH. AN EXPLORATORY FACTOR ANALYSIS WAS ALSO PERFORMED ON THE TEACHERS' RESPONSES TO THE SURVEY ITEMS. FOUR CORRELATED FACTORS EMERGED AS A RESULT OF THIS ANALYSIS, AND WERE NAMED ACCORDING TO THE SALIENT LOADINGS OF ITEMS THAT MADE UP EACH FACTOR. LOADINGS ON THE FIRST THROUGH FOURTH FACTORS REVEALED AN EXPERT MODEL FACTOR, COLLABORATIVE MODEL FACTOR, PERSONAL COMMUNICATIONS FACTOR, AND TIME MANAGEMENT FACTOR RESPECTIVELY. THE SURVEY INSTRUMENT IS APPENDED. (AUTHOR/RB)
A Survey of Teacher Perceptions of School Psychologists as Consultants: A Factor Analytic Study of Evaluation in the Consultation Process

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ABSTRACT

Evaluation should be an important component in every model and exchange of the consultation process. The consultation literature included considerable information on the importance of the inclusion of evaluation at the completion of consultation exchanges, but little emphasis is placed on how to evaluate and its meaning. The researcher sought to (a) develop a reliable instrument to evaluate the consultation process, (b) administer the survey instrument to a sample of 116 elementary and middle school teachers, and (c) interpret teachers' perceptions descriptively and factor analytically. Descriptive interpretation of the teachers' responses on the evaluation survey revealed many interesting findings among which was a concern for better time management and personal communications among school psychologists and teachers during consultation. Reliability analysis on the instrument revealed a strong alpha coefficient of .93 in its initial development, indicating promising psychometric strength. An exploratory factor analysis was also performed on the teachers' responses to the survey items. Four correlated factors emerged as a result of this analysis, and were named according to the salient loadings of items that made up each factor. Loadings on the first through fourth factors revealed an Expert Model factor, Collaborative Model factor, Personal Communications factor, and Time Management factor respectively.

METHOD

Subjects. Three public schools, two elementary and one middle school, in a moderately suburban midwestern community were selected for the study. Each of the schools employs a different school psychologist as consultant. A total of 116 teachers (93%) in these schools...
three schools completed a questionnaire assessing their perceptions and expectations of the consultation service provided by their school psychologist. In each school, the school psychologist was itinerant, in that he/she served other buildings in the school district as well. Of these 116 teachers, 97 (84%) were regular education teachers and 19 (16%) were special education teachers. Among the teachers, the mean number of years teaching was 13.4 years (range = 9 months to 35 years).

Instrumentation. A consultation evaluation scale was developed by the researcher as a means of collecting objective and quantifiable data regarding teachers' perceptions and expectations of school psychologists as consultants. The Consultation Evaluation Scale for Schools (CESS) consists of 25 items describing expectations and perceptions of the consultation process among teachers and school psychologists. These 25 items are presented in a 4-point Likert style. Scale points for Likert values ranged from (1) Strongly Disagree to (4) Strongly Agree. (See Appendix A for CESS).

RESULTS

In this present study, the alpha coefficient for the Consultation Evaluation Scale for Schools (CESS) was .93 and a mean item rating (on a 4-point scale, with 4 indicating favorable perceptions of school psychologists and/or endorsement of a collaborative model) of 2.41 with a standard deviation of .28. Histograms of subjects' responses to each item indicate normal distributions for each of the items. All items have a range of 3.00 indicating that subjects' choices were not restricted within the 1 to 4 response style. A preliminary reliability analysis produced inter-item correlations that ranged from -.23 to .81 (mean = .34). This internal consistency reliability analysis yields a standardized item alpha coefficient of .93. Examinations of the potential alpha levels with each item removed shows that no single item should be deleted, as deletion of no item results in a higher alpha level. Corrected item-total correlations range from .08 to .84.

Table 1 presents the Varimax rotated factor loadings for each item on its corresponding factor. Prior to analyzing the factor analysis, Bartlett's Test of Sphericity was checked to be sure
that the matrix was factorable. Bartlett’s Test of Sphericity has a Chi Square value of 2125.02, which is significant at p<.0001. This provides evidence that the correlation matrix is significantly different from an identity matrix (R=1, reject) and factor analysis is appropriate. A principal components analysis extracted four factors (Eigenvalues >1) accounting for 62.8% of the total variance. The four factors were named Expert Model, Collaborative Model, Personal Communications, and Time Management respectively. Factor one, the Expert Model, was made up of items concerned with the school psychologist as the expert and leader in the consultation process. Factor two, the Collaborative Model, included item responses endorsing a cooperative partnership between teacher and school psychologist that emphasized a more team approach. The third factor, personal communications, is named so because each item reflects the communication skills of school psychologists. The final factor, time management, deals with items that tap at how school psychologists manage time as well as how they respect the time of teachers.

DISCUSSION

The preliminary reliability and exploratory factor analyses of the Consultation Evaluation Scale for School (CESS) indicate potential for further study and revision. The measure shows good possibilities for the future. Additionally, the instrument presents evidence of construct validity as shown by the high item loadings in all six factors. Future revision with the scale may include the addition of more items for the possibility of subscales. Such subscales could be identified by the current factors that emerged in this analysis. Certainly, the current items can provide a good initial foundation, as removal of any would cause the overall alpha to be lowered.

Examination of the descriptive information from the teacher responses revealed the importance of being able to utilize both an expert and collaborative model during consultation. Teachers’ perceptions show evidence that both models of consultation in the schools are popular and desired. These results lack support for one model over the other, but rather present evidence for flexibility among school psychologists in a consulting role with
teachers. Certainly, an implication of such findings for school psychologists is to have the necessary skills for both styles of consultation. Among the findings from this sample, it is evident that only 54% of teachers agree that school psychologists have good personal communication skills. This leaves 46% of the teachers perceiving communication skills during consultation as less than adequate. Moreover, teachers' perceptions of how consultants manage their time reflects a considerable weakness. School psychologists were rated as possessing poor time management skills by 69% of the 116 teachers surveyed. This deficit may provide an initial point for change in the consultation process. Possibly, school psychologists need to examine their time management skills or it may be that teachers need to understand the role of the school psychologist as a consultant with more clarity. Certainly, one may see this as a starting point for the improvement of consultation services in the school.

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APPENDIX A
CONSULTATION EVALUATION SCALE FOR SCHOOLS (CESS)

Instructions: Assume you will be consulting with your school psychologist concerning a student in your class. For each statement listed below, circle the one most appropriate response as it applies to your agreement with its content. Your response is viewed as extremely important to the ongoing improvement and facilitation of the consultation program and the consultant’s professional growth in your school. Thank you for your assistance.

<table>
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1. The role of the consultant should be to develop the intervention strategies to use in the classroom.
   1\ 2\ 3\ 4
2. The consultant and I may each indicate any further consultation after the initial meeting.
   1\ 2\ 3\ 4
3. The consultant should identify the problem based on observations he/she makes.
   1\ 2\ 3\ 4
4. The consultant is comfortable in discussing sensitive problems.
   1\ 2\ 3\ 4
5. Once the consultant makes the recommendations, further follow-up is probably not necessary.
   1\ 2\ 3\ 4
6. The consultant makes efficient use of time.
   1\ 2\ 3\ 4
7. During consultation, the consultant knows how and when to ask good questions.
   1\ 2\ 3\ 4
8. The consultant is reliable about keeping appointments and being on time.
   1\ 2\ 3\ 4
9. The consultant and I should identify and define problems based on the data we both collected.
   1\ 2\ 3\ 4
10. Once the consultant and I make recommendations and implement strategies, further follow-up would be beneficial.
    1\ 2\ 3\ 4
11. The consultant understands the pressures and time constraints of my job.
    1\ 2\ 3\ 4
12. The consultant helps me to identify resources to use in problem solving.
    1\ 2\ 3\ 4
13. The consultant is prompt in providing feedback.
    1\ 2\ 3\ 4
14. The intervention strategies to use in the classroom should be developed by both the consultant and the teacher.
    1\ 2\ 3\ 4
15. It should be the role of the consultant to initiate any further consultation after the initial meeting.
    1\ 2\ 3\ 4
16. The consultant helps me to see situations in more objective ways.
    1\ 2\ 3\ 4
17. The consultant typically relies on one approach to solving problems.
    1\ 2\ 3\ 4
18. The consultant encourages a partnership between me and others with whom I work that are also involved with the current problem.
    1\ 2\ 3\ 4
19. The role of the consultant should be to suggest and implement recommendations based on the problem.
    1\ 2\ 3\ 4
20. The consultant is a good listener.
    1\ 2\ 3\ 4
21. The consultant encourages me to try a variety of interventions.
    1\ 2\ 3\ 4
22. The availability of the consultant for services is good.
    1\ 2\ 3\ 4
23. The consultant and I should both identify suggestions and interventions that we will both then implement.
    1\ 2\ 3\ 4
24. The consultant explains his or her ideas clearly.
    1\ 2\ 3\ 4
25. The role of the consultant is to help me identify alternative solutions to the problem.
    1\ 2\ 3\ 4