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Cross-Informant Consistency in Externalizing and Internalizing Problems in Early Adolescence

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The concept of cross-informant consistency has long been a topic of interest for those involved in assessment of behavior problems in adolescence. The purpose of the present study was to replicate and expand the existing literature by including four informants (mother, father, teacher, and adolescent self-report) and examining correlations among them as well as differences between reporters on an absolute level of both internalizing and externalizing problems. Fifty-two young adolescents (ranging in age from 11 to 15 years) and their mothers, fathers, and social studies teachers participated in the study. The Conduct Disorder subscale, Socialized Aggression subscale, and Anxiety/Withdrawal subscale of the Revised Behavior Problem Checklist were used. Results indicated that teachers showed little agreement with other informants on conduct problems (teachers reporting fewer problems), while parents and adolescents showed significant agreement. Informants showed no agreement on the measure of covert problems (socialized aggression), and all reports showed agreement on internalizing problems (although teachers continued to report fewer problems). Implications for assessment of young adolescents are discussed.

KEY WORDS: adolescence assessment; informant consistency.

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INTRODUCTION

The concept of cross-informant consistency has long been a topic of interest for those involved in assessment of behavior problems in adolescents. The best summary of information available in this area comes from a recent meta-analysis of the child and adolescent literature (Achenbach, McConaughy, & Howell, 1987). This review included all studies located in *Psychological Abstracts* from 1967 to 1985 that had cross-informant analyses of problematic child behavior that met certain design criteria. Overall analysis resulted in correlations in the .20–.30 range among different informants. Specifically, the correlation between parent and teacher report of problem behaviors was .27; between teacher and self, .20; and between parent and self, .25. No significant differences were found in informant consistency for girls versus boys or for mother versus father report. Finally, analyses for age revealed that there was a significantly higher cross-informant consistency for children than adolescents and for externalizing than internalizing problems.

The finding that cross-informant consistency decreases during the adolescent years is an interesting and conceviably clinically important issue. During adolescence, there is an increase in prevalence of some dimensions of psychopathology [i.e., depressive feelings and major depression (Kazdin, 1988; Rutter, 1986)] and a change in form of other problems (e.g., antisocial behavior) (Loeber, 1982). If the assessment of various types of psychopathology of adolescence is not accurate, then decisions concerning the need for treatment, the behavior selected for treatment, the selection of treatment strategies, or the evaluation of such strategies may be made inappropriately.

A recent investigation (Phares, Compas, & Howell, 1989) focused on assessment of problem behaviors in young adolescents. These investigators examined cross-informant consistency between mother, teacher, and self-report on Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) and the corresponding Youth Self Report version of the CBCL (Achenbach & Edelbrock, 1987). The CBCL has three scores: total behavior problems, internalizing problems, and externalizing problems. Small significant correlations were found between parent and teacher reports for all three scores, parent and child reports of total behavior problems, teacher and child reports of internalizing problems, and teacher and child reports of externalizing problems. These results suggest that both the particular cross-informant dyad being examined and the behavior being studied are important when evaluating consistency of behavior reports of young adolescents.

The purpose of the present study was to replicate and expand the Phares *et al.* (1989) study. As in that study, we collected measures of mother, teacher,

and young adolescent report of internalizing and externalizing problems. Similarly, we conducted cross-informant correlations. In expanding upon Phares and associates' (1989) work, we included a report from fathers, and in contrast to the existing literature, we examined the absolute level of each problem area and conducted analyses to determine if different informants reported differing levels of severity of problem behaviors. Although reports across informants may correlate, the absolute level of problem behavior may vary substantially, leading to different conclusions about the severity of the problem and, consequently, the need for treatment.

METHOD

Subjects

Fifty-two young Caucasian adolescents (22 females, 30 males) and their mothers, fathers, and social studies teachers participated in this study. Adolescents' ages ranged from 11.3 to 15.0 years, with a mean of 12.9 years. Mothers, fathers, and adolescents as a family were paid $75 for their voluntary participation. Each adolescent's social studies teacher, who typically had known the adolescent for at least 3 months, was mailed several questionnaires, and when these were returned, each was paid $5. Social studies teachers were randomly selected from teachers of required courses (e.g., math, English) to participate in the project.

Measures

The Revised Behavior Problem Checklist (RBPC; Quay & Peterson, 1987) consists of 89 behavior problems that children and adolescents may exhibit. Each item is scored as 0 (no problem), 1 (mild problem), or 2 (severe problem). Factor analyses (Quay & Peterson, 1973) have shown evidence of four major subscales. Three subscales were of interest to this investigation: Conduct Disorder (CD)—a measure of externalizing types of problems such as fighting and swearing; Socialized Aggression (SA)—a measure of more covert externalizing problems such as lying; and Anxiety/Withdrawal (AW)—a measure of internalizing types of problems such as appearing sad and/or nervous. Quay and Peterson (1987) report a mean test–retest reliability across subscales of .67. Extensive validity data, including discrimination between clinic-referred and normal groups of children, have also been presented (Quay & Peterson, 1987). The RBPC was designed to be used by parents and teachers in rating a child or young adolescent. For this investigation, the instructions

also were reworded for self-report purposes. Social studies teachers, fathers, and mothers were given the typical RBPC to report on the adolescent's behavior, while the adolescent was given the self-report form.

Procedures

Participants called for information about the project after learning about it through newspaper advertisements, flyers given at school, etc. If the family met the criteria for participation (e.g., intact, appropriate ages), a session was set up at the local university. All mothers, fathers, and adolescents attended a session at a local university.

When participants arrived at the session, the project was explained to each family separately. Parents and adolescents completed consent forms and release of information forms to allow the teacher to complete the RBPC After the initial paperwork was completed, families were taken to a classroom to complete a packet of questionnaires, including the RBPC. Each member of the family individually completed questionnaires.

RESULTS

To test for absolute differences in levels of perception of problem behavior between reporters, 2 (gender of adolescent) × 4 (reporter: mother, father, teacher, adolescent) analyses of variance (ANOVAs) were conducted. Means for all three measures of problem behavior are given in Table I.[4] For conduct problems, a significant gender effect was found [$F(1,46) = 4.77, p < .05$], such that observers report more problems in males than females. More pertinent to our purposes was the main effect for report [$F(3,138) = 9.67, p < .001$) and the absence of a gender × reporter interaction [$F(3,138) = 1.05, p > .10$]. Subsequent Newman–Keuls tests indicated that mothers, fathers, and the adolescents themselves reported significantly more adolescent conduct problems than teachers ($p < .05$).

For the socialized aggression subscale, a significant main effect for reporter was found [$F(3,138) = 11.06, p < .001$], while a trend was found for gender [$F(1,46) = 3.58, p < .10$] and no significant interaction was found [$F(3,138) = 1.62, p > .10$]. Subsequent Newman–Keuls tests indicated that adolescents reported significantly higher scores ($p < .05$) on the socialized aggression subscale than each of the adult observers (mothers, fathers, and teachers).

[4]Data are missing for some measures for some subjects.

Table I. Means for Different Reporters of Externalizing Problems and Internalizing Problems

	Mother		Father		Teacher		Self	
	Males	Females	Males	Females	Males	Females	Males	Females
Externalizing								
CD[a]	8.07	5.89	6.52	6.16	4.24	1.53	10.28	6.26
SA[b]	1.31	.63	.90	1.47	1.38	.00	4.55	2.74
Internalizing								
AW	4.31	2.95	3.24	3.74	2.45	1.74	4.28	4.53

[a]Conduct Disorder Subscale—Revised Behavior Problem Checklist.
[b]Socialized Aggression Subscale—Revised Behavior Problem Checklist.
[c]Anxiety/Withdrawal Subscale—Revised Behavior Problem Checklist.

On the internalizing (anxiety/withdrawal) measure, no significant effect was found for gender [$F(1,46) = .15, p > .10$] or for a gender × reporter interaction [$F(3,138) = 1.43, p > .10$]; however, a significant main effect for reporter was found [$F(3,138) = 7.12, p < .001$]. Subsequent Newman–Keuls tests indicated that teachers reported significantly less symptoms of anxiety or withdrawal than mothers, fathers, and the adolescents themselves ($p < .05$).

Since gender of adolescent did not significantly interact with type of reporter in any of the ANOVAs, correlations between reporters were conducted, collapsing across gender. Correlations between reporters for the measures are given in Table II. For conduct problems, teacher scores were not related to any other reporter. Mother and father scores did agree significantly, as did mother and adolescent self-report scores, while father and self-report scores were not significantly related. The mother–father correlation was large, while the mother–self-report correlation was moderate.

For socialized aggression, while a trend emerged for agreement between mother and self-report of socialized aggressive behaviors, no significant relationships were found between any two reporters for this category of behavior problems.

Finally, for internalizing behaviors (anxiety/withdrawal), each reporter's score significantly correlated with every other reporter's score. The largest relationship was found between mother and father report, while self-report and mother report, as well as self-report and father report, also reached large magnitudes. Moderate relationships were found between teacher and father report, teacher and self-report, and teacher and mother report.

DISCUSSION

The general finding of this investigation was that relationships among various informants of early adolescent behavior depend on what behavior

Table II. Correlations Among Reporters of Externalizing Problems and Internalizing Problems

	Mother	Father	Teacher	Self
CD[a]				
Mother	—	.62**	.06	.37**
Father		—	.19	.20
Teacher			—	−.02
Self				
SA[b]				
Mother	—	.20	−.07	.27*
Father		—	−.14	.02
Teacher			—	−.06
Self				
AW[c]				
Mother	—	.82**	.35**	.67**
Father		—	.44**	.58**
Teacher			—	.40**
Self				

[a]Conduct Disorder Subscale—Revised Behavior Problem Checklist.
[b]Socialized Aggression Subscale—Revised Behavior Problem Checklist.
[c]Anxiety/Withdrawal Subscale—Revised Behavior Problem Checklist.
*$p < .10$.
**$p < .01$.

is being examined and what type of data analysis is used. For conduct problems, or overt externalizing problems, teachers generally showed little agreement with mothers, fathers, and adolescents in terms of both the correlational and the ANOVA analyses. In the latter, teachers reported significantly fewer conduct problems than all other informants. The facts that there is substantial structure imposed on the adolescent's behavior by the classroom setting and that teachers know the adolescent less well than the adolescent's parents or the adolescent himself/herself are two plausible explanations for this finding. For these types of behaviors, mothers, fathers, and the adolescents themselves agree on the absolute level of behavior and, in terms of the correlational analyses, mothers agree with fathers and adolescents.

For socialized aggression, there was no agreement across reporters. Adolescents reported significantly more problems than other reporters. This finding is actually not surprising, as many of the behaviors on this scale are more covert in nature (e.g., lying, stealing) and adults may not be aware of their existence.

For internalizing types of problems, as with conduct problems, less of these behaviors were reported by teachers than by other reporters, again perhaps because teachers know less about their students than do the other

reporters utilized in this study. However, there was a high level of agreement among all informants in terms of the correlational analyses. These adults are not consistent with Achenbach *et al.* (1987), who found that agreement was higher across informants for externalizing than internalizing types of problems. The age of the child may be the key in this case. While conduct problems of young children are quite obvious behaviors in the home and classroom, internalizing "behaviors" are less obvious by their very nature. However, evidence from the social psychological literature is emerging that observers can reliably rate five different facets of personality in young adolescents and adults, one of which is anxiousness (e.g., Digman & Inouye, 1986). It may be that, as children enter adolescence, some of their conduct problems become less obvious (e.g., lying, stealing), while a generally anxious personality style becomes more obvious.

Four general observations about our results appear noteworthy. First, the magnitudes of the correlations we obtained among informants were generally larger than those reported by Achenbach *et al.* (1987). This may be the result of the instrument used to assess problems, the age group studied, or some other factor. Future research will be necessary in order to determine what variables are responsible for the present results relative to prior findings. Second, as has been noted by Achenbach *et al.* (1987), lack of consistency across informants does not necessarily mean error. Different informants have different environments from which they observe, which can contribute to their final assessment. Third, whose perspective is most important may depend on the type of behavior being examined. For example, as internalizing problems typically reflect "feelings," moods, or other subjective states, self-report may be most important. In contrast, overt externalizing problems, reflecting disruptions to the environment, may be best assessed by someone else (e.g., teacher or parent) who can be more objective about these observable problems. Fourth, teachers were found to report fewer adolescent problems on average than parents and adolescents themselves reported. This may have implications for behavioral assessment in the clinical setting. Parents and adolescents may be falsely perceived as "hysterical" or extremist when discussing the adolescents' problems when compared to the teacher report. However, as has just been noted, at this point in time one cannot assume that one informant is more accurate than another one.

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