School Psychology Quarterly, Vol. 21, No. 1, 2006, pp. 13-33

Patterns of Parent-Reported Homework Problems Among ADHD-Referred and Non-Referred Children

Thomas J. Power and Branlyn E. Werba
The Children's Hospital of Philadelphia/University of Pennsylvania School of Medicine

Marley W. Watkins
Pennsylvania State University

Jennifer G. Angelucci and Ricardo B. Eiraldi
The Children's Hospital of Philadelphia/University of Pennsylvania School of Medicine

This study was the first to investigate patterns of homework problems, as assessed by parent reports on the Homework Problem Checklist (HPC), among children in general education and those referred to an evaluation and treatment program for attention-deficit/hyperactivity disorder (ADHD). In Study 1, parents of general education students in grades 3 through 6 (n = 675) completed the HPC. An exploratory factor analysis revealed two salient factors: Inattention/Avoidance of Homework (Factor I), and Poor Productivity/Nonadherence with Homework Rules (Factor II). Study 2, an exploratory factor analysis of a clinic-referred sample (grades 1 through 8; n = 356), uncovered a factor structure that was highly similar to that of the general sample. For purposes of validation, the HPC factors were correlated with subscales from the Behavior Assessment System for Children-Parent and Teacher Ratings Scales. These correlations demonstrated that Factor I was primarily related to aspects of homework functioning that are readily observable by parents (e.g., inattention, avoidance of work, and anxiety during homework); Factor II was primarily related to aspects of homework functioning that are observable by both parents and teachers (failure to accurately record homework assignments, and failure to complete and submit homework). The two-factor model is a useful way to conceptualize homework problems and has important implications for future practice and research aimed at improving assessment and intervention for children with significant homework difficulties.

Achieving academic competence is critical for the healthy development of children. Competent academic performance is important both as an end in itself, and

---

The authors thank Jessica Palumbo for her assistance with data analysis.
Address correspondence to Thomas Power, The Children's Hospital of Philadelphia (CSH-116), 3405 Civic Center Blvd., Philadelphia, PA 19104; E-mail: Power@email.chop.edu

because it is closely associated with academic achievement during the school-age years and health outcomes in adolescence and adulthood (Masten & Coatsworth, 1998).

Homework is an important component of academic functioning that cuts across both school and home systems. Homework has been defined as tasks assigned by teachers to be completed during noninstructional periods of the day (Cooper, 1989), and it accounts for 20% of the total time American students spend on academic tasks (West Chester Institute for Human Services Research, 2002). Homework is typically completed at home, but it can be completed in various school contexts, such as in after-school programs and during noninstructional classroom time (Keith & Degraff, 1997).

Although the benefits of homework have been debated widely, research for the most part supports the popular belief that homework has positive effects on academic performance. Amount of time spent on homework is generally associated with academic achievement assessed by using both test scores and class grades (Cooper, 1989). Further, amount of homework completed may be more strongly related to academic functioning than actual time spent on homework (Cooper, Lindsay, Nye, & Greathouse, 1998). The relationship between homework performance and academic achievement has been shown to be moderated by grade level, such that the relationship generally is stronger for students in the upper as opposed to lower grades (Cooper, 1989). Homework also provides opportunities for children to develop study skills and work habits (Keith & DeGraff, 1997) and affords families opportunities to be involved in their child's education (Olympia, Sheridan, & Jenson, 1994), which in turn is related to student outcomes (see Christenson & Sheridan, 2001).

Children with attention and learning problems, including those with ADHD, are universally regarded as having significant homework difficulties (Epstein, Polloway, Foley, & Patton, 1993; Power, Karustis, & Habboushe, 2001). Inattention and learning problems may contribute to a wide range of homework difficulties, including failure to accurately record homework assignments, procrastination, rushing through homework, failure to remain on task, and a tendency to make careless mistakes. Research has confirmed that children with learning disabilities and ADHD have significantly more homework problems than their peers (Epstein et al., 1993; Lahey et al., 1994). The need to understand and address the homework difficulties of children with attention and learning problems is underscored by research demonstrating that homework problems are associated with numerous impairments in addition to academic underachievement, including parent-child conflict (Daniel-Crotty, 2000), family-school relationship problems (Olympia et al., 1994), anxiety, and depression (Karustis, Power, Rescorla, Eiraldi, & Gallagher, 2000).

There has been very little research regarding the homework problems of children with attention and learning disorders, despite our knowledge of the pervasiveness of homework difficulties in these populations and the relationship of homework problems to academic impairment. One factor that has hindered the advancement of knowledge in this area is that few instruments have been developed to assess children's homework problems. The most commonly used measure in research and practice is the Homework Problem Checklist (HPC; Anesko, Schoiock, Ramirez, & Levine, 1987), a parent-report instrument. The HPC consists of 20 items that generally reflect the diversity of homework problems encountered by students, including failure to bring home assignments and remember what homework has been assigned, avoidance of homework and failure to comply with directives to get to work, inattention and frustration when working on homework, failure to complete work, and failure to return completed homework to school.

Several studies support the use of the HPC as a screening and outcome assessment measure. The composite score on the HPC has demonstrated utility in screening children for homework problems (Anesko et al., 1987; Soffer, Power, Werba, & Blom-Hoffman, 2003) and the HPC was used as an index of academic impairment in field trials of ADHD diagnostic criteria (Lahey et al., 1994) for the *Diagnostic and Statistical Manual of Mental Disorders–Fourth Edition* (DSM-IV; American Psychiatric Association, 1994). Further, the HPC was used as an outcome measure in the Multimodal Treatment Study of Children with ADHD (MTA; Hinshaw et al., 1997), and an analysis of the items on this scale was useful in identifying specific homework-related behaviors as targets for intervention (Epstein et al., 1993).

Research thus far using the HPC generally has investigated homework problems as a unitary construct, which potentially limits our understanding of the nature of homework problems and the design and implementation of intervention approaches. For example, it is unknown how the items on this instrument cluster together to form differential patterns of homework problems among children. Identifying such patterns may elucidate the types of homework problems encountered by students in general education and those referred for learning and attention problems. Further, examining patterns of homework problems may facilitate the development of intervention methods to address clusters of homework problems, given the inefficiency of addressing each problem separately. Identifying dimensions of homework problems may also be useful in evaluating the specific outcomes of interventions targeting homework problems (e.g., Anesko & Levine, 1982; Olympia, Jenson, & Hepworth-Neville, 1996; Power et al., 2001) on salient domains of homework performance.

In this article we report on the results of two related studies examining the factor structure of the HPC and the association between identified factors and important dimensions of child functioning. These studies were designed to address the following questions:

1. What are the salient dimensions of homework problems, as assessed by the HPC, among children in grades 3 through 6 who are placed in a general education setting? (Study 1)
2. What are the salient dimensions of homework problems, as assessed by the HPC, among children referred to a clinic-based ADHD evaluation and treatment program? (Study 2)

3. Are the factor solutions for children in the general sample and those in the referred sample congruent? (Study 2)
4. Do the identified factors differ in their correlates with parent and teacher ratings of behavior? (Study 2)

STUDY 1

METHOD

Participants

Participants for this study were 675 students enrolled in grades 3 through 6 in two suburban public elementary schools (n = 316 and 359) located in a school district in the Southwest section of the United States. Although demographic data from participants in the study were not available, school district enrollment was 8% Hispanic, 2.2% Asian, 2.1% Black, .7% Native American, and 87% Caucasian. Eligibility for the free or reduced lunch program (12.6% and 17%, respectively) and mean performance on group reading achievement tests (62.3% and 60.7%, respectively) was similar across the two schools.

Measures

Homework Problem Checklist (HPC). The HPC (Anesko et al., 1987) is a 20-item rating scale completed by parents which assesses a broad range of problems related to the completion of homework. Each item on the scale represents homework problems that commonly occur among children (see Table 1). The authors of this measure developed the items based on a review of popular parenting books and interviews with parents, teachers, and clinicians. Parents are requested to rate the frequency with which each behavior occurs on a 4-point Likert scale (0 = *never,* 1 = *at times,* 2 = *often,* 3 = *very often*).

This measure has been shown to have excellent internal consistency (Anesko et al., 1987). Among children in grades 2 through 4, alpha coefficients have ranged from .90 to .92. Corrected item-total correlations for children at these grade levels ranged from .31 to .72. Research has shown that boys generally are rated as having more frequent and severe homework problems than girls. Also, children with disabilities have been shown to have more significant homework problems, as assessed by the HPC, than those in general education (Epstein et al., 1993). Further, research has demonstrated that this measure is sensitive to the effects of behavioral interventions targeting homework problems (Anesko & O'Leary, 1982; Power et al., 2001).

Procedures

The HPC was one measure included in a needs assessment study to develop an effective school-wide study skills program for students in grades 3 to 6. At

TABLE 1. Pattern Coefficients and Communalities for Two Factors Resulting from Factor Analysis Using Principal Axis Extraction and Promax Rotation for General Education Students (Grades 3 to 6)

No.	Item	Factor I	Factor II	h^2
1.	Fails to bring home assignment and materials	.041	**.609**	.406
2.	Doesn't know exactly what has been assigned	.197	**.454**	.369
3.	Denies having homework assignment	–.016	**.675**	.441
4.	Refuses to do homework assignment	.183	**.400**	.295
5.	Whines or complains about homework	**.548**	.100	.386
6.	Must be reminded to sit down and start homework	**.530**	.224	.495
7.	Puts off doing homework, waits until last minute	**.509**	.237	.483
8.	Doesn't do homework unless someone is in the room	**.771**	.008	.603
9.	Doesn't do homework unless someone does it with him/her	**.699**	–.055	.438
10.	Daydreams or plays with objects	**.747**	–.056	.504
11.	Easily distracted by noises or activities of others	**.796**	–.158	.484
12.	Easily frustrated by homework assignment	**.632**	–.024	.379
13.	Fails to complete homework	.130	**.593**	.474
14.	Takes unusually long time to do homework.	**.730**	–.098	.443
15.	Responds poorly when told to correct homework	**.567**	.126	.437
16.	Produces messy or sloppy homework	**.495**	.134	.355
17.	Hurries and makes careless mistakes	**.406**	.244	.361
18.	Dissatisfied with work, even when does a good job	.134	.138	.063
19.	Forgets to bring assignment back to class	–.102	**.733**	.444
20.	Deliberately fails to bring assignment back to class	–.156	**.608**	.263

Note: Boldface indicates salient pattern coefficients (≥ .40).

both schools, principals sent parents a letter requesting completion of a battery of measures, including the HPC, to help the school develop effective homework policies and study skills strategies. Communication with the parents was conducted through the students; children were asked to bring home the forms and return them to their teachers. Each school used a system that involved sending letters and forms to parents on a specified day of the week. In this way, the parents knew to check their children's book bags for communications from the school on the same day each week. This system may have contributed to the relatively high return rate from the schools. Return rates for the two schools were similar: 359 out of 471 students (76.2%) returned the HPC from one school, and 316 of 455 (69.5%) returned this scale from the other school. Likewise, the pattern of returns across grades was similar: The highest response was in fourth grade (87% and 75%), the lowest response was in sixth grade (65% and 60%), and an intermediate response rate was obtained for grades 3 and 5. All identifying information was removed before HPC data were released for research use.

Statistical Analyses

Factor analyses were guided by the best practice suggestions of Fabrigar, Wegener, MacCallum, and Strahan (1999), Preacher and MacCallum (2003), and Russell (2002), among others. Given the uncertainty surrounding the structure of the HPC, exploratory rather than confirmatory factor analysis was chosen (Browne, 2001). Common factor analysis was selected over principal components analysis because the goal of the study was to identify the latent structure of the HPC (Wegener & Fabrigar, 2000). Additionally, common factor analysis may produce more accurate estimates of population parameters than does principal components analysis (Widaman, 1993). Given its relative tolerance of multivariate nonnormality and its superior recovery of weak factors, principal axis extraction was used (Briggs & MacCallum, 2003). Communalities were initially estimated by squared multiple correlations. Following the advice of Velicer, Eaton, and Fava (2000), minimum average partials (MAP; Velicer, 1976) and parallel analysis (Horn, 1965), supplemented by a visual scree test (Cattell, 1966), were used to determine the number of factors to retain for rotation. Some evidence favors overestimating rather than underestimating the number of factors (Wood, Tataryn, & Gorsuch, 1996); therefore, experts suggest that the highest to lowest number of factors be examined until the most interpretable solution is found (Ford, MacCallum, & Tait, 1986; Gorsuch, 1997). For both theoretical and empirical reasons, it was assumed that factors would be moderately correlated (Gorsuch, 1997). Thus, a Promax rotation with a k value of 4 was selected (Tataryn, Wood, & Gorsuch, 1999).

For interpretation, three salient item loadings (pattern coefficients) were necessary to form a factor, and complex items were excluded (Gorsuch, 1997). Salient loadings were those greater than or equal to $|.40|$ (Stevens, 2002). Additionally, an internal consistency reliability coefficient (alpha) of at least .80 was necessary to accept a factor.

The similarity of factor structures across subsamples (i.e., genders, schools) was examined by computing a congruence coefficient (r_c; Harman, 1976), which is an index of factor similarity. According to Jensen (1998), an r_c value of .90 or greater indicates a high degree of factor similarity, and an r_c value of .95 or greater indicates "practical identity of the factors" (p. 99). Accordingly, r_c values of at least .90 are necessary for corresponding factors to be considered highly similar.

RESULTS

Exploratory Factor Analysis

Results from Bartlett's Test of Sphericity (Bartlett, 1954) indicated that the correlation matrix for items on the HPC was not random ($\chi^2 = 5627.9$; $df = 190$; $p < .001$). The Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic was .93, well above the minimum standard suggested by Kline (1994) for conducting factor analyses. Measures of sampling adequacy for each item were also within reasonable limits, and an inspection of the raw correlation matrix revealed a substantial number of correlations greater than .30. Thus, the correlation matrix was appropriate for factor analysis (Tabachnick & Fidell, 2001).

The parallel, MAP, and scree criteria all indicated that two factors should be retained. Three factors were initially extracted because some evidence favors overextracting rather than underextracting (Wood et al., 1996). The resulting solution was examined for both substantive and statistical fit. Because the third factor had only two items with salient loadings (# 16, # 17), this factor was eliminated from consideration. Subsequently, two factors were extracted and rotated to a Promax solution. As illustrated in Table 1, the two factors accounted for 40.6% of the total variance, with one factor saliently loaded by 12 items (α = .90) and the other by 7 items (α = .80). There were no cross-loadings and only one item (#18) did not load on either factor. The two factors were correlated at .69, which is not high enough to threaten discriminant validity (Kline, 1998).

The similarity of the factor structure of the HPC for boys and girls was examined to verify that this scale was measuring the same constructs across gender. This resulted in r_c values of .97 and .99 for Factors I and II, respectively. Thus, the HPC factor structure was almost identical for boys and girls in grades 3–6. Separate factor analyses were conducted for each school, and factor pattern coefficients were compared to determine the similarity of the factor structure across schools. The HPC structure was almost identical for both school samples (r_c = .98 and .97 for Factors I and II, respectively). This two-factor solution was also robust to extraction (Maximum Likelihood and Principal Components) and rotation (Varimax and Oblimin) methods. Consequently, the obtained two-factor model was distinguished by simple structure and factor replicability, two powerful indicators of an adequate solution (Kline, 1994).

Factor I consisted of items referring to inattention and avoidance during the course of homework (i.e., easily distracted by noises, daydreams, procrastinates, takes unusually long time, complains about homework). Factor II was related to poor productivity and non-adherence with homework rules (e.g., does not know what homework has been assigned, fails to bring home assignments, fails to complete work, forgets to bring assignment back to class).

Gender and Grade Differences

A 2 (gender) x 4 (grade) MANOVA, using the two factors of the HPC as dependent measures, demonstrated a significant main effect for gender of students, F (2, 666) = 30.23, $p < .001$, $\chi^2 = .083$. Subsequent univariate ANOVAs revealed significant gender differences on each factor of the HPC ($p < .001$, χ^2 = .078 and .056 for Factors I and II, respectively). There was also a significant main effect for grade ($p < .05$), but the associated effect size was very small (χ^2 = .01). The interaction of gender by grade was not significant. These findings supported the reporting of means and standard deviations for the two factors of the HPC by gender, but not grade level (see Table 2). Table 2 also includes means and standard deviations for the 20-item Total Score on the HPC ($\alpha = .94$).

DISCUSSION OF STUDY 1

The results of an exploratory factor analysis of parent ratings on the HPC for a sample of children in grades 3 through 6 attending general education classrooms indicated that this measure consists of two distinct dimensions: Inattention/Avoidance of Homework, and Poor Productivity/Nonadherence with Homework Rules. The replication of this two-factor model using alternative extraction and rotation methods confirmed the adequacy of the solution. This pattern emerged for both boys and girls and was replicated across the two schools participating in this study. Alpha coefficients were at or above an acceptable level for each factor.

For these students, boys scored higher than girls on both factors of the HPC as well as on the composite scale consisting of all 20 items of the measure. Scores on the total scale and both factors demonstrated very little variation as a function of grade level.

A limitation of the study is that the sample was derived from one geographic region of the country, the Southwest, and consisted of predominantly Caucasian children who lived in a suburban area. The generalizability of the two-factor model to populations of children living in other sections of the country, residing in urban and rural settings, and belonging to racial and ethnic minority groups should be examined further. The applicability of these findings to children with identified attention problems, who are considered at high risk for homework problems, is addressed in Study 2.

STUDY 2

METHODS

Participants

Participants for this study included consecutive referrals to an ADHD evaluation and treatment center situated in a tertiary-care pediatric hospital located in a

TABLE 2. Means and Standard Deviations of Factor Scores and the Total Score on the HPC for Boys and Girls in the General Education Sample (Grades 3 to 6)

	Boys *M* (*SD*)	Girls *M* (*SD*)
Factor I	11.78 (7.00)	8.08 (5.37)
Factor II	3.70 (3.11)	2.32 (2.30)
Total Score	15.93 (9.49)	10.75 (7.15)

Note: Only items with salient pattern coefficients, as indicated in Table 1, were included in the computation of Factor I and Factor II scores. All items of the HPC were included in the computation of the total score.

large metropolitan area in the Northeast section of the United States. Children were referred by pediatricians, school professionals, and parents because of concerns related to inattention and/or hyperactivity/impulsivity. Only children in grades 1 through 8 were included in this study because the homework concerns for older students are likely to be different from those in elementary and middle school. Altogether, 411 children were in the designated grade range for eligibility in this study. Fifty-five cases were discarded, either because the Homework Problem Checklist was not completed by parents, or because at least one item was not completed. Thus, 356 (87%) of potential cases were included in the factor analyses computed in Study 2.

Most of the sample of 356 children were boys (76%), which is representative of clinic-referred children for attention and learning problems. The mean age of the children was approximately 9 years, 5 months. The mean grade was 3.3 (*SD* = 2.0). Twelve percent of the children had a history of at least one grade failure. The racial/ethnic composition of the families was: 81.2% Caucasian, not of Hispanic origin; 13.2% Black, not of Hispanic origin; 3.4% Hispanic/Latino; .8% Asian; and 1.4% Other. The socioeconomic status of this sample as determined by the Four-Factor Index of Social Status (Hollingshead, 1975) was: 3% in Category I (laborers), 9% in Category II (machine operators), 24% in Category III (skilled craftsman, clerical and sales workers), 29% in Category IV (small business owners, technicians), and 38% in Category V (major business owners, professionals). Seventy-seven percent of children were being raised in a two-parent family. Most children did not have a history of prior treatment for ADHD (66%), using either medication or psychosocial treatment. Eleven percent of children were currently being treated with psychostimulant medications.

According to the Diagnostic Interview for Children and Adolescents (DICA-R-P; Reich, Shayka, & Taibleson, 1995), 71% of the children met criteria for ADHD (28% Combined subtype, 39% Inattentive subtype, and 4% Hyperactive-Impulsive subtype).[1] According to the DICA, 30% of the children met criteria for oppositional defiant disorder (ODD), 2% met criteria for conduct disorder (CD), 5% had at least one depressive disorder (major depressive episode, bipolar disorder, dysthymia), and 17% had at least one anxiety disorder (generalized anxiety disorder, separation anxiety disorder, phobia). The mean percentile score for total problems on the ADHD Rating Scale-IV as rated by parents was 87.4 (SD = 14.7), and the mean percentile on this scale as rated by teachers was 77.0 (*SD* = 18.2).

The sample of children was further reduced for the correlational analyses. Of the 356 participants, 312 (88%) had data on the measures used in these analyses: the Behavior Assessment System for Children–Parent Rating Scale (BASC-PRS; Reynolds & Kamphaus, 1992) and the BASC-Teacher Rating Scale (BASC-TRS; Reynolds & Kamphaus, 1992).

[1]Clinician diagnoses of ADHD, based on a multi-informant, multi-method battery, yielded a similar percentage of children meeting diagnostic criteria for ADHD (78%).

Measures

Behavior Assessment System for Children–Parent Rating Scale (BASC–PRS). The BASC–PRS (Reynolds & Kamphaus, 1992) is a multi-axial behavior rating scale designed to assess children's emotional and behavioral functioning. The BASC-PRS has a preschool, child, and adolescent version to provide an assessment of children across a broad developmental range. The factor composition of this measure is highly similar across the three versions, although the item content of factors differs slightly across versions. For purposes of this study, the Inattention, Hyperactivity, Aggression, Conduct Problems, Anxiety, and Depression subscales were examined, given the hypothesized relationship between these factors and homework problems (Karustis et al., 2000). The psychometric properties of these subscales have been demonstrated through extensive research (Reynolds & Kamphaus, 1992).

Behavior Assessment System for Children–Teacher Rating Scale (BASC–TRS). The BASC–TRS (Reynolds & Kamphaus, 1992) is a multi-axial behavior rating scale that is similar in content to the BASC–PRS and provides an assessment of behavioral and emotional functioning for children from preschool through adolescence. The Inattention, Hyperactivity, Aggression, Conduct Problems, Learning Problems, and Study Skills subscales of the BASC–TRS were included in this study. The psychometric properties of these subscales have been demonstrated through extensive research (Reynolds & Kamphaus, 1992).

Statistical Analyses

Factor analytic procedures used in Study 2 were equivalent to those used in Study 1. The similarity of factor structures across samples (school-based general education sample and clinic-based referred sample) was evaluated using Harmon's congruence coefficient. In addition, factors derived from the HPC were correlated with subscales of the BASC–PRS and BASC–TRS to establish the convergent and discriminant validity of the HPC dimensions. It was hypothesized that parent ratings on the two factors of the HPC would be significantly and moderately correlated with parent ratings on the BASC factors, given the known association between homework problems and behavioral/emotional problems, as well as the shared method variance. Also, it was expected that teacher ratings on the BASC factors would demonstrate significantly higher correlations with the second factor of the HPC as compared to the first factor, because the second factor relates to behaviors that are more observable to teachers than the first factor.

RESULTS

Exploratory Factor Analyses

Bartlett's Test of Sphericity ($\chi^2 = 4370.8$; $df = 190$; $p < .001$), the Kaiser-Meyer-Olkin statistic (.93), and measures of sampling adequacy for each item indicated that the correlation matrix was appropriate for factor analysis (Tabachnick & Fidell, 2001). The parallel, MAP, and scree criteria all indicated that two factors should be retained. Subsequently, two factors that accounted for 50.8% percent of the total variance were extracted and rotated to a Promax solution. As illustrated in Table 3, one factor was saliently loaded by 10 items (α = .90) and the other by 8 items (α = .88). Two items (#16, #17) that loaded on Factor II for the general education sample loaded on Factor 1 for the clinic-referred sample, although it should be noted that these items had the lowest factor loadings (< .50) among the items with salient loadings for both sets of factor analyses. There were no cross-loadings, but two items (#4, #18) did not load on either factor. The two factors were correlated at .65, similar to the interfactor correlation found in Sample 1.

There was an insufficient number of girls in this sample to test the similarity of this factor structure across gender. The factor solution demonstrated some variations across different extraction and rotation methods. When Varimax and Equamax rotations were substituted for the original Promax method, factor loadings were higher for items 4, 16, and 17, resulting in similar loadings on both

TABLE 3. Pattern Coefficients and Communalities for Two Factors Resulting from Factor Analysis Using Principal Axis Extraction and Promax Rotation for Children in the Clinic-Referred Sample (Grades 1 to 8)

No.	Item	Factor I	Factor II	h^2
1.	Fails to bring home assignment and materials	.013	**.756**	.585
2.	Doesn't know exactly what has been assigned	.177	**.632**	.576
3.	Denies having homework assignment	–.063	**.826**	.618
4.	Refuses to do homework assignment	.302	.379	.384
5.	Whines or complains about homework	**.795**	.006	.638
6.	Must be reminded to sit down and start homework	**.782**	–.025	.586
7.	Puts off doing homework, waits until last minute	**.782**	.036	.648
8.	Doesn't do homework unless someone is in the room	**.736**	.058	.602
9.	Doesn't do homework unless someone does it with him/her	**.693**	.060	.538
10.	Daydreams or plays with objects	**.778**	–.043	.564
11.	Easily distracted by noises or activities of others	**.724**	–.114	.430
12.	Easily frustrated by homework assignment	**.776**	–.013	.589
13.	Fails to complete homework	.111	**.713**	.624
14.	Takes unusually long time to do homework.	**.763**	–.003	.578
15.	Responds poorly when told to correct homework	**.530**	.198	.456
16.	Produces messy or sloppy homework	.224	**.422**	.351
17.	Hurries and makes careless mistakes	.146	**.485**	.348
18.	Dissatisfied with work, even when does a good job	.193	.211	.134
19.	Forgets to bring assignment back to class	–.150	**.850**	.580
20.	Deliberately fails to bring assignment back to class	–.116	**.645**	.332

Note: Boldface indicates salient pattern coefficients (≥ .40).

factors. In contrast, a principal components extraction followed by Promax rotation resulted in item 4 becoming salient on Factor II, but did not alter items 16 and 17.

Congruence of Factor Structures for the General Education and Clinic-referred Samples

Despite these variations, the factor solutions for children in the general education sample (Study 1) and clinic-referred sample (Study 2) were highly similar. A comparison of the factor structures, with dimensions derived using principal axis factoring with Promax extraction in both cases, strongly confirmed the congruence of the factor structures across samples. The r_c values were .97 for Factor I and .96 for Factor II, indicating that the two factor structures were virtually identical (Jensen, 1998). The internal consistency estimates for the two factors in Sample 2 were very similar to those calculated for Sample 1 participants. Consequently, the HPC is well represented by the two-factor structure identified in Table 1 for the sample of general education students as well as for children referred for problems related to ADHD.

Comparison of Factor Scores Across Samples

We next compared children in the two samples with regard to their scores on the two factors of the HPC, using a 2 (sample) by 2 (gender) MANOVA. Only children in Sample 2 enrolled in grades 3 through 6 ($n = 170$) were included in these analyses so that the grade range of children across the samples was equivalent. Grade was not included in the model because of its minimal effect size, as determined in Study 1. The results demonstrated a main effect for sample (Wilks' Lambda (2, 840) = 251.38, p .001, $\eta^2 = .374$), associated with a very large effect for size. Subsequent univariate ANOVAs were conducted to examine the effect of sample for each factor of the HPC. Sample differences were significant at $p < .001$ for each factor, with ratings of each HPC factor being higher for the referred sample than the general education sample. The magnitude of the sample effect was large for both Factor I ($\eta^2 = .369$; Cohen's $d = 2.04$) and Factor II ($\eta^2 = .133$; $d = 1.11$). The MANOVA also demonstrated a significant main effect for gender of child and the interaction of group by sex ($p < .05$), but the effect size associated with these terms was very small ($\eta^2 = .011$ and .015, respectively).

A similar pattern of findings emerged when a 2 (sample) by 2 (gender) ANOVA was conducted using the total HPC score as the dependent variable. The main effect of sample was significant $p < .001$ and very large ($\eta^2 = .328$; $d = 1.88$), whereas the main effect for gender and the interaction term was significant ($p < .01$ in each case) but associated with a very small effect size ($\eta^2 = .01$ in each case). Means and standard deviations for Factor I, Factor II, and Total scores on the HPC for the general education and clinic-referred samples are provided in Table 4.

TABLE 4. Means and Standard Deviations of Factor Scores and the Total Score on the HPC for Children in the General Education and Clinic-Referred Samples (Grades 3 to 6)

	General Education Sample *M* (*SD*)	ADHD Clinic-referred Sample *M* (*SD*)
Factor I	9.82 (6.45)	23.78 (8.21)
Factor II	2.97 (2.79)	6.58 (4.66)
Total Score	13.19 (8.71)	31.05 (12.06)

Correlations Between HPC Factor Scores and BASC Factor Scores

Table 5 presents correlations between factor scores on the HPC and factor scores on selected BASC dimensions. As hypothesized, the ratings on the HPC factors demonstrated significant correlations with parent ratings on the BASC factors. The results indicated that both HPC factors had a moderate to high correlation with parent ratings of Inattention. Most of the other correlations between the HPC factors and BASC–PRS factors were in the low to moderate range. In contrast, most of the correlations between the HPC factors (parent-rated) and the BASC–TRS (teacher-rated) factors were low to negligible. Given that the HPC is a parent-report measure, it was expected that correlations between the HPC factors and BASC–PRS factors (within informant) would be higher than correlations between the HPC factors and BASC–TRS dimensions (cross-informant).

TABLE 5. Correlations of the HPC Factors with the BASC-PRS and BASC-TRS Factors ($n = 312$), and Comparisons between Correlation Coefficients for Each BASC Factor

BASC Factor	Factor I	Factor II	Comparison between correlations (*Z* statistic)
BASC–PRS			
Inattention	.67**	.61**	1.93
Hyperactivity	.35**	.26**	2.12*
Aggression	.34**	.32**	0.46
Conduct Problems	.28**	.42**	–3.24**
Anxiety	.32**	.17*	3.51**
Depression	.36**	.30**	1.42
BASC–TRS			
Inattention	.17*	.26**	–2.01*
Hyperactivity	–.03	.07	–2.15*
Aggression	–.06	.13*	–4.16**
Conduct Problems	.02	.20**	–3.94**
Learning Problems	.29**	.27**	0.64
Study Skills	–.25**	–.42**	3.75**

Note: For a description of the *Z* statistic used to compare correlations, see Steiger (1980).
*$p < .05$; **$p < .004$ (corrected alpha level using the Bonferoni procedure).

To examine whether a differential relationship existed between each BASC subscale and the two HPC factors, a Z statistic was used to evaluate the difference between two correlations derived from a single set of participants (Steiger, 1980). In other words, the correlations between Factor I and each BASC factor were compared to correlations between Factor II and the same BASC factor. Several of the correlation pairs were significantly different from each other when the alpha level was corrected using the Bonferoni procedure (i.e., $p < .004$). Factor I (Inattention/Avoidance of Homework) generally demonstrated a stronger association with the BASC–PRS factors than did Factor II (Poor Productivity/Nonadherence with Homework Rules); the correlation pairs were significantly different ($p < .004$) in the case of the BASC–PRS Anxiety factor. As hypothesized, Factor II generally demonstrated a stronger association with the BASC-TRS factors than did Factor I. The correlations between Factor II and the Aggression, Conduct Problems, and Study Skills dimensions of the BASC–TRS were significantly higher ($p < .004$) than the correlations between Factor I and these BASC–TRS dimensions. Also, the correlation between Factor II and parent-reported Conduct Problems was significantly higher than the correlation between Factor I and this BASC dimension.

DISCUSSION OF STUDY 2

The results of an exploratory factor analysis of parent ratings on the HPC for a sample of children in grades 1 through 8 referred for inattention and/or impulse control problems indicated that this measure consists of two distinct dimensions: Inattention/Avoidance of Homework and Poor Productivity/Nonadherence with Homework Rules. Subsequent factor analyses demonstrated some variations across extraction and rotation methods, although these were generally minor. Also, two items that loaded on Factor I with the general education sample loaded on Factor II with the clinic-referred sample. Despite these variations, factor congruence statistics clearly demonstrated the similarity of the factor structures across the samples in Studies 1 and 2. In other words, the dimensions that emerged from factor analyses of the HPC in the general education and clinic-referred samples were virtually identical, suggesting that these are salient factors for both school-age children in the general population and for children referred for attention and/or impulse control problems.

A comparison of scores across samples revealed that children in the referred sample were rated significantly higher than those in the general education sample on both HPC factors, and the magnitude of the difference between samples on each factor was large (i.e., greater than 1 standard deviation). Given that approximately 75% of the clinic-referred sample met criteria for ADHD, this finding confirms the results of previous research demonstrating high rates of homework problems among children with ADHD (Lahey et al., 1994).

The correlational findings provided additional information about the meaning of the two factors that emerged from factor analyses of the HPC. Factor I reflects homework difficulties that are more observable to parents than to teachers; whereas Factor II reflects homework problems that are observable to both parents and teachers.

Correlations between the HPC and BASC factors suggested that both dimensions of the HPC are strongly associated with level of inattention. Factor I clearly had a stronger association with parent-reported anxiety than did Factor II. In contrast, Factor II had a stronger relationship with externalizing problems, including teacher-rated Aggression and Conduct Problems and parent-rated Conduct Problems, than did Factor I. Factor I generally had a higher association with parent-rated BASC dimensions than did Factor II. As hypothesized, Factor II generally had a higher association with teacher-rated BASC dimensions than did Factor I.

A limitation of Study 2 is that the sample was derived from children referred to an ADHD evaluation and treatment program from one geographic region of the country, the Northeast, who were predominantly White and middle class. The generalizability of the two-factor model to populations of children who are referred to school mental health professionals and primary care physicians for attention and/or impulse control problems should be examined in the future. Also, the replicability of the findings with children residing in other sections of the country, and who belong to diverse racial/ethnic minority groups and socioeconomic groups requires further investigation.

GENERAL DISCUSSION

This study identified two salient dimensions of homework problems, as assessed by parent report on the HPC, among a sample of students in a general education setting as well as a sample of children referred to a clinic-based ADHD program. In contrast to previous studies that have assumed that homework problems are a unitary construct, this study identified the presence of two relatively distinct and salient dimensions of parent-reported homework problems. One dimension, labeled Inattention/Avoidance of Homework (Factor I), referred to problems of paying attention, working efficiently, and working independently during the course of homework. The other dimension, labeled Poor Productivity/Nonadherence with Homework Rules (Factor II), referred to problems with the input and output of homework; for example, knowing what assignments have to be performed, completing assignments, and submitting homework to the teacher.

The two-factor solution identified in the general sample was essentially replicated in a sample of children in similar grades referred to a clinic for problems related to ADHD. The congruence of factor structures across the general education and clinical samples strongly suggests that the two-factor solution is applicable to nonreferred children as well as those referred for ADHD-related difficulties. Further, correlational analyses investigating relationships between the two factors of the HPC and parent and teacher reports on the BASC indicated that Factor I is associated with ADHD-related symptoms and anxiety, and Factor II is associated with a lack of study skills which are observable to teachers and with a pattern of non-adherence with rules.

Clinical Implications

This study suggests that there may be two types of homework problems. Items comprising Factor I refer to homework problems arising during the course of homework completion that parents encounter in working with their children. In contrast, items on Factor II refer to homework problems occurring at the beginning and end of the homework process that are observable to both parents and teachers.

This two-factor conceptualization has important implications for designing and implementing interventions to address children's homework problems. Specifically, for children who have high scores on Factor I, family-based interventions may be a useful approach, as this intervention method is designed to improve attention to task, work efficiency, and parent-child interactions during homework (e.g., homework setting and contingency management strategies; see Kahle & Kelley, 1994; Olympia et al., 1996; Power et al., 2001). In contrast, for children who have high scores on Factor II, family-school interventions designed to improve parent-teacher communication and the accuracy of recording homework assignments (see Sheridan, 1996), and strategies to increase rates of homework completion and accuracy (see Kelley, 1990; Power et al., 2001) may be indicated. In addition to its utility for intervention planning, this two-factor model may be useful for monitoring the progress of children with homework problems and evaluating the effectiveness of strategies to address homework difficulties. The brevity of the HPC enhances its utility as a progress monitoring tool.

Clinicians should be highly cautious in using the means and standard deviations obtained in the general education sample (see Table 2) as norms in clinical practice because they were derived from only one school district, and that system was located in the Southwest section of the United States. In addition, the use of means and standard deviations for norm referencing is problematic due to the skewed distribution of scores on Factor I, Factor II, and the total scale of the HPC. Percentiles associated with raw scores on the HPC are presented in the Appendix. In the absence of normative data at a national level, these statistics may have some utility in delineating estimated benchmarks for homework behavior.

Study Limitations and Directions for Future Research

As indicated previously, the samples investigated in both studies were primarily Caucasian (over 80%) and middle class, and were obtained from different regions in the U.S. Research is needed to verify the two-factor model of parent-reported homework problems for nonreferred and referred samples both within and across geographic regions.

Homework problems in this study were assessed using parent reports. Although parents are an important source of information about children's homework difficulties, they are not the only source. Clearly it is important to obtain information about homework functioning from teachers as well. It is likely that patterns of homework problems as rated by teachers are different from those reported by parents, given that teachers typically are not able to observe children when they are actually performing homework assignments, although they can observe students when homework is assigned and returned. Also, the patterns of homework problems identified in this study were based on an assessment of homework difficulties using the HPC. Although the HPC assesses many of the homework problems common to children, it may omit some aspects of homework (e.g., work efficiency) that are important to measure (Kahle & Kelley, 1994).

Parent-child conflict and teacher-reported homework problems are two criterion variables that should be investigated in further validation studies of this two-factor model of homework problems. Given that Factor I refers to homework problems that arise in a family context when children are working on their homework, it is reasonable to hypothesize that severity of homework problems, as assessed by Factor I, is associated with level of parent-child conflict. Similarly, it is reasonable to hypothesize that Factor II is associated with the severity of teacher-reported homework problems, given that Factor II refers to homework problems that are observable by both parents and teachers. Measures of parent-child conflict are presently available for use in validation studies (see Abidin, 1990; Wells et al., 2000), but teacher-report scales for assessing homework problems do not exist and need to be developed.

Conclusions

This research suggests that homework problems are not a unitary construct and that there are actually two forms of parent-reported homework problems: Inattention/Avoidance of Homework, which manifests itself in the family setting; and Poor Productivity/Non-adherence with Homework Rules, which is observable at home and school. These patterns were demonstrated both in a general education setting as well as a clinic setting that serves children with attention and/or impulse control problems. This two-factor model of parent-reported homework problems appears to have considerable utility in understanding the nature of children's homework problems, designing targeted interventions to address homework difficulties, and monitoring homework performance in response to intervention.

APPENDIX

Percentiles Associated with Raw Scores for the HPC Factors and Total Scale for 317 Boys and 358 Girls in General Education Enrolled in Grades 3 Through 6

	Factor I		Factor II		Total Scale	
Raw Score	Boys	Girls	Boys	Girls	Boys	Girls
0–1	4	9	27	46	4	7
2	9	13	40	60	5	10
3	13	19	56	74	7	13
4	16	28	67	86	10	18
5	20	36	77	91	13	26
6	25	44	84	95	16	31
7	30	54	89	98	21	36
8	33	59	92	99	24	44
9	39	64	95	99	29	50
10	45	69	96	99	33	55
11	52	78	97	99	35	61
12	60	82	98	99	38	63
13	64	87	98	99	41	70
14	69	89	99	99	48	74
15	73	91	99	99	52	78
16	77	92	99	99	57	81
17	80	93	99	99	62	84
18	82	94	99	99	64	87
19	85	95	99	99	69	89
20	87	96	99	99	72	91
21	90	97	99	99	74	92
22	91	98			77	93
23	94	99			81	94
24	95	99			83	95
25	96	99			85	96
26	97	99			87	96
27	98	99			88	97
28	98	99			89	98
29	98	99			90	98
30	99	99			91	99
31	99	99			93	99
32	99	99			94	99
33	99	99			95	99
34	99	99			95	99
35	99	99			96	99
36	99	99			97	99
37					97	99
38					98	99
39					98	99
40					99	99
41–60					99	99

Note: The score for Factor I was derived by summing the responses for items 5–12 and 14–17. The score for Factor II was derived by summing the responses for items 1–4, 13, 19, and 20. All items were included in the computation of the total scale score.

References

Abidin, R. A. (1990). *Parenting Stress Index–Short Form.* Charlottesville, VA: Pediatric Psychology Press.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Anesko, K. M., & Levine, F. M. (1982). *Winning the homework war.* New York: Simon & Schuster.

Anesko, K. M., & O'Leary, S. G. (1982). The effectiveness of brief parent training for the management of children's homework problems. *Child and Family Behavior Therapy, 4,* 113–126.

Anesko, K. M., Schoiock, G., Ramirez, R., & Levine, F. M. (1987). The Homework Problem Checklist: Assessing children's homework difficulties. *Behavioral Assessment, 9,* 179–185.

Bartlett, M. S. (1954). A further note on the multiplying factors for various ?2 approximations in factor analysis. *Journal of the Royal Statistical Society, 16,* 296–298.

Briggs, N. E., & MacCallum, R. C. (2003). Recovery of weak common factors by maximum likelihood and ordinary least squares estimation. *Multivariate Behavioral Research, 38,* 25–56.

Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research, 36,* 111–150.

Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research, 1,* 245–276.

Christenson, S. L., & Sheridan, S. M. (2001). *Schools and families: Creating essential connections for learning.* New York: Guilford Press.

Cooper, H. (1989). *Homework.* White Plains, NY: Longman.

Cooper, H., Lindsay, J. J., Nye, B., & Greathouse, S. (1998). Relationships among attitudes about homework, amount of homework assigned and completed, and student achievement. *Journal of Educational Psychology, 90,* 70–83.

Daniel-Crotty, S. (2000). *Parent-mediated homework intervention for children with attention-deficit/hyperactivity disorder: Its impact on academic and family functioning.* Unpublished doctoral dissertation, MCP/Hahnemann University.

Epstein, M. H., Polloway, E. A., Foley, R. M., & Patton, J. R. (1993). Homework: A comparison of teachers' and parents' perceptions of the problems experienced by students identified as having behavioral disorders, learning disabilities, or no disabilities. *Remedial and Special Education, 14,* 40–50.

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4,* 272–299.

Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology, 39,* 291–314.

Gorsuch, R. L. (1997). Exploratory factor analysis: Its role in item analysis. *Journal of Personality Assessment, 68,* 532–560.

Harman, H. H. (1976). *Modern factor analysis* (3rd ed.). Chicago: University of Chicago Press.

Hinshaw, S. P., March, J. S., Abikoff, H., Arnold, L. E., Cantwell, D. P., Conners, C. K., et al. (1997). Comprehensive assessment of childhood attention-deficit hyperactivity disorder in the context of a multisite, multimodal clinical trial. *Journal of Attention Disorders, 1,* 217–234.

Hollingshead, A. B. (1975). *Four-factor Index of Social Status.* New Haven, CT: Yale University Department of Sociology.

Horn, J. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30,* 17–185.

Jensen, A. R. (1998). *The g factor: The science of mental ability.* Westport, CT: Praeger.

Kahle, A. L., & Kelley, M. L. (1994). Children's homework problems: A comparison of goal setting and parent training. *Behavior Therapy, 25,* 275–290.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39,* 31–36.

Karustis, J. L., Power, T. J., Rescorla, L. A., Eiraldi, R. B., & Gallagher, P. R. (2000). Anxiety and depression in children with ADHD: Unique associations with academic and social functioning. *Journal of Attention Disorders, 4,* 133–149.

Keith, T. Z., & DeGraff, M. (1997). Homework. In G. G. Bear, K. M. Minke, & A. Thomas (Eds.), *Children's Needs II: Development, problems, and alternatives* (pp. 477–488). Bethesda, MD: National Association of School Psychologists.

Kelley, M. L. (1990). *School-home notes: Promoting children's classroom success.* New York: Guilford Press.

Kline, P. (1994). *An easy guide to factor analysis.* New York: Routledge.

Kline, R. B. (1998). *Principles and practice of structural equation modeling:* New York: Guilford.

Lahey, B. B., Applegate, B., McBurnett, K., Biederman, J., Greenhill, L., Hynd, G. W., et al. (1994). DSM-IV field trial for attention-deficit hyperactivity disorder in children and adolescents. *American Journal of Psychiatry, 151,* 1673–1685.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53,* 205–220.

Olympia, D. E., Jenson, W. R., & Hepworth-Neville, M. (1996). *Sanity savers for parents: Tips for tackling homework.* Longmont, CO: Sopris West.

Olympia, D. E., Sheridan, S. M., & Jenson, W. R. (1994). Homework: A natural means of home-school collaboration. *School Psychology Quarterly, 9,* 60–80.

Power, T. J., Karustis, J. L., & Habboushe, D. F. (2001). *Homework success for children with ADHD: A family-school intervention program.* New York: Guilford Press.

Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. Understanding Statistics, 2, 13–43.

Reich, W., Shayka, M. A., & Taibleson, C. (1995). *Diagnostic Interview for Children and Adolescents: DSM-IV Revision (Parent Form).* St. Louis, MO: Washington University.

Reynolds, C. R., & Kamphaus, R. W. (1992). *Manual for the Behavior Assessment System for Children.* Circle Pines, MN: American Guidance Service.

Russell, D. W. (2002). In search of underlying dimensions: The use (and abuse) of factor analysis in Personality and Social Psychology Bulletin. *Personality and Social Psychology Bulletin, 28,* 1629–1646.

Sheridan, S. M. (1996). *Conjoint behavioral consultation: A procedural manual.* New York: Plenum Press.

Soffer, S. L., Power, T. J., Werba, B., & Blom-Hoffman, J. (2003, August). Family School success: A multi-systemic intervention for children with ADHD. In G. J. DuPaul (Chair), *Symposium conducted at the annual meeting of the American Psychological Association, Toronto, Canada.*

Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin, 87,* 245–251.

Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Mahwah, NJ: Erlbaum.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th Ed.). Boston: Allyn and Bacon.

Tataryn, D. J., Wood, J. M., & Gorsuch, R. L. (1999). Setting the value of k in promax: A Monte Carlo study. *Educational and Psychological Measurement, 59,* 384–391.

Velicer, W. F. (1976). Determining the number of components from the matrix of partial correlations. *Psychometrika, 41,* 321–327.

Velicer, W. F., Eaton, C. A., & Fava, J. L. (2000). Construct explication through factor or component analysis: A review and evaluation of alternative procedures for determining the number of factors or components. In R. D. Goffin & E. Helmes (Eds.), *Problems and solutions in human assessment: Honoring Douglas N. Jackson at seventy* (pp. 41–71). Boston: Kluwer Academic.

Wegener, D. T., & Fabrigar, L. R. (2000). Analysis and design for nonexperimental data. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 412–450). NY: Cambridge University Press.

Wells, K. C., Epstein, J. N., Hinshaw, S. P., Conners, C. K., Klaric, J., Abikoff, H. B., et al. (2000). Parenting and family stress treatment outcomes in attention deficit hyperactivity disorder (ADHD): An empirical analysis in the MTA study. *Journal of Abnormal Child Psychology, 28,* 527–542.

Westchester Institute for Human Services Research. (2002, June). *The balanced view: Homework.* Retrieved October 30, 2003 from http://www.sharingsuccess.org/code/bv/homework.pdf

Widaman, K. F. (1993). Common factor analysis versus principal component analysis: Differential bias in representing model parameters? *Multivariate Behavioral Research, 28,* 263–311.

Wood, J. M., Tataryn, D. J., & Gorsuch, R. L. (1996). Effects of under- and overextraction on principal axis factor analysis with varimax rotation. *Psychological Methods, 1,* 354–365.

Action Editor: Beth Doll

Thomas J. Power, Ph.D., Associate Professor of School Psychology in Pediatrics and Education at the University of Pennsylvania is Director of the Center for Management of ADHD and the Community Schools Program at The Children's Hospital of Philadelphia. His research interests include family-school interventions for ADHD and community-based prevention. Dr. Power is the current Editor of School Psychology Review. He received his Ph.D. in Psychology in Education at the University of Pennsylvania in 1984.

Branlyn Werba, Ph.D., is a staff psychologist in the Division of Oncology at The Children's Hospital of Philadelphia. Her current research interests include understanding the impact of serious illness on children and families, and interventions that promote family, school, and hospital collaboration. Dr. Werba received her Ph.D. in Clinical and Health Psychology from the University of Florida. She completed her clinical internship and postdoctoral fellowship at the Children's Hospital of Philadelphia.

Marley W. Watkins, Ph.D., is Professor and Program Head of the School Psychology Program at The Pennsylvania State University and a Diplomate of the American Board of Professional Psychology. He received his Ph.D. in school psychology from the University of Nebraska-Lincoln and was a practicing school psychologist for 15 years before entering academia. The Ph.D. School Psychology Program at the Pennsylvania State University is accredited by the APA.

Jennifer Angelucci, M.A., works as a consultant to the Friend to Friend Program at the Children's Hospital of Philadelphia and has contributed to the program over the past four years. She is a graduate of Immaculata University with a master's degree in Counseling Psychology and is certified as a school psychologist in Pennsylvania.

Ricardo Eiraldi, Ph.D., is an Assistant Professor of Clinical Psychology in the Department of Pediatrics at the University of Pennsylvania, and serves as the Program Director of the Behavioral Health in Urban Schools program at The Children's Hospital of Philadelphia. His research interests include the assessment of ADHD and the application of models of help-seeking behavior for the study of health disparities in ADHD. Dr. Eiraldi received his Ph.D. from Hahnemann University.