

## COMMENTARY

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### Teacher Consultation Research in Attention Deficit Hyperactivity Disorder: A Cause for Congratulation or Consolation?

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There is little doubt of the important role that schools play in providing services to children with emotional and behavioral disorders (e.g., Burns et al., 1995; Leaf et al., 1996). Seventy to eighty percent of children who receive mental health services get them in schools (Burns et al., 1995). Despite this increased attention to schools as a provider of mental health services, there has been relatively little empirical research evaluating interventions that target specific emotional and behavioral disorders (Rones & Hoagwood, 2000) within school settings. Moreover, the small amount of school-based mental health intervention research has generally neglected to focus specifically on improving and testing effect on academic outcomes (Hoagwood, Olin, Kerker, Kratochwill, Crowe, & Saka, 2007).

This omission in the literature is especially significant when we consider that chil-

dren with attention deficit hyperactivity disorder (ADHD) have chronic difficulties and often capture the attention of teachers and other school staff because of their behavioral and academic problems. Yet few school-based interventions specifically target the needs of these students. This omission in the literature is both noteworthy and long-standing. In fact, in 1991–1992, during the period for planning the design of the National Institute of Mental Health Multimodal Treatment Study of Children with ADHD (MTA), the MTA collaborators searched the known literature for a rigorously tested school-based consultation–intervention model for children with ADHD that might improve either behavior or academic outcomes. At that point, none could be found that had been tested in a randomized controlled trial, so the MTA collaborators chose to employ a novel program developed by investigators at the University of California, Ir-

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vine, previously selected as a “promising practice” by the U.S. Department of Education (Wells et al., 2000).

Thus, the articles in this special issue give voice to an extremely understudied topic. In our view, teacher consultation models are an exceptionally promising approach to support the academic success of students with ADHD. This topic is made even more important given the limited effect of psychostimulant medication and behavioral therapies on the academic performance of students with ADHD (e.g., MTA Cooperative Group, 1999, 2004). The studies represented in this issue form a part of a much-needed evidence base for teacher consultation models with ADHD children.

Specifically, the three intervention-focused papers in this special issue invite us to thoughtfully peel back the layers of the processes underlying consultation interventions. The article by Volpe, DuPaul, Jitendra, and Tresco (2009) builds on their prior research, in which they evaluated the effect of two active consultation models, intensive data-based academic intervention and traditional data-based academic intervention (DuPaul et al., 2006; Jitendra et al., 2007). In their earlier reports, these investigators found no significant differences between the two interventions, in terms of academic gains; rather, students in both groups showed academic improvements (DuPaul et al., 2006; Jitendra et al., 2007).

In the current report, at 1-year post-treatment, these same students maintained some of these gains, but did not show sustained academic growth, with the exception of a couple of scores derived from the Woodcock Johnson III Tests of Achievement (Volpe et al., 2009). As the authors note, the study underscores the need for ongoing intervention and support to sustain academic gains after an initial intervention period. Because ADHD is a chronic condition, removing an active and effective intervention may lead students to stagnate or even lose some of the gains previously made (e.g., MTA Cooperative Group, 1999, 2004).

However, other important issues are raised by this work. Both interventions worked sim-

ilarly, suggesting that some of the components of the consultation may not be as important as the simple problem-solving and supportive relationship in which the teachers and consultants are participating, perhaps akin to the non-specific factors in the psychotherapy literature between therapist and client (Jensen, Weersing, Eaton-Hoagwood, & Goldman, 2005). These findings also beg the question of whether any consultation method leads to better outcomes than none at all, an issue that merits much more study.

Addressing this theme, Schultz, Evans, and Zerpell (2009) examined a teacher consultation model for middle school students with ADHD in which schools were randomly assigned to receive the Challenging Horizons Program—Consultation Model or “treatment as usual.” The consultation model itself focused on supporting teachers to implement psychosocial interventions targeting organization skills, study skills, behavioral self-monitoring, and social skills. This article builds on an earlier report by the authors. After failing to find significant gains in grades in their initial analyses (Evans, Serpell, Schult, & Pastor, 2007), the authors reformulated the academic challenges faced by middle school students with ADHD, shifting their outcomes focus from *improvements and academic gains* to *prevention of negative outcomes*, specifically *academic failure*. After transforming grades into a more objective outcome measure, the authors’ new analyses showed that the Challenging Horizons Program—Consultation Model was successful in reducing or delaying students’ academic failure, even after controlling for IQ. Although post hoc reanalyses of previously negative trials can be fraught with uncertainty, the authors’ thoughtful reanalysis nicely illustrates the importance of thinking critically about our choice of outcome measures and how different points on the spectrum of functioning might be affected by an intervention, a crucial consideration when one studies a novel intervention such as teacher consultation methods, where the field is in its empirical infancy.

Taken together, these two studies (Schultz et al., 2009; Volpe et al., 2009) advance our

understanding of the role that consultants, working with teachers, can play in improving the academic outcomes of students with ADHD. We suggest, however, that the effects of these consultation models are not as pronounced or sustained as one might hope, suggesting the need for our field to shore up and further develop our consultation models.

Nonetheless, if we scrutinize the approaches to teacher consultation represented in this special issue, the findings suggest that each of the models do show promise in positively affecting students with ADHD. But what are the core components of an efficacious consultation approach? Is it specific communication and feedback about student academic functioning? Is it imparting specific skills to teachers and then supporting them as they deliver these targeted interventions? Or would we be better off simply combining all such approaches into a single model that provides both a mechanism for data-driven feedback *and* training and supporting teachers for implementing evidence-based interventions targeting students' academic success? Although all of these approaches are quite plausible, we must also entertain the possibility that ultimate effects are not fully borne by any specific consultation method, but by possible "nonspecific" factors mentioned earlier.

In this regard, the work of Erchul and colleagues (2009) provides an illuminating look into the *process* of delivering a consultative intervention, as they examined different aspects of the content of the meetings between teachers and consultants. The study builds on their previous work in which they found that *teacher dominance* was more appropriate in some instances, whereas *consultant dominance* seemed critical in others. Interestingly, during the Problem Identification Interview, the more teachers dominated the conversation, the more positively they viewed the intervention and their students' outcomes. Yet teacher dominance during this phase was also related to poorer treatment integrity (Erchul et al., 2007).

In the current study, an analysis of the Problem Analysis Interview, a later phase in the consultation process, attempts to dominate

by the teacher resulted in lower treatment integrity, and successful teacher dominance was associated with poorer intervention effectiveness and acceptability. On the other hand, consultant dominance was associated with greater treatment integrity (Erchul et al., 2009).

Such findings suggest that at different phases of the consultation process different roles, types of expertise, and interactions may be important. Perhaps early on in the consultation process as the problem is identified, the teacher is arguably the "expert" and *should* have the more dominant voice, and the consultant should *listen*. Although this postulate is logical and makes common sense, this possibility will need further research. And quite possibly, at other stages when the consultant must provide a useful analysis of the problem and identify appropriate interventions, treatment outcomes might be better if the consultant dominates—as suggested by their findings. If these interpretations are correct and confirmed by future studies, these findings suggest that consultation is not just about the specific components (or techniques) of a model, but also about the subtle ebb and flow of an unfolding *relationship and working alliance* between the teacher and consultant. Mutual respect, collaboration, and trust must be present in order for a consultation process to be effective. Said another way, a well-designed consultation program delivered in the context of a negative working alliance seems unlikely to succeed.

Applying these hypotheses to the Volpe et al. findings that drew from the same project, we suggest that we should not expect much differentiation between two data-based consultation models, because both models were active treatments, including numerous evidence-based components, and given the likely variation within both arms of the study in how the unmeasured, nonspecific processes between consultant and teacher may have played out. Were relationship factors more consequential than the consultation framework itself?

Thus, we suggest that consultation effects can be best understood by considering

not just the specific procedures and techniques employed in the consultation–intervention model, but also by assessing consultant and teacher characteristics *and* the consultant–teacher working alliance. Although the work of Volpe et al. begins to scratch the surface, much more research needs to examine these factors.

As an ultimate step, if relationship factors are a central consideration as we suggest, consultation research might be further enhanced to the extent that the consultant helps the teacher improve his or her relationship with the child while the academic skills are targeted. Even an otherwise effective consultation model might be neutralized by negative child and teacher perceptions of each other, or the child’s negative perceptions of the teacher’s attempts to intervene. Sadly, our understanding of these unfortunately labeled “non-specific” factors has been hindered by the non-specificity of our research questions. We will need much more explicit efforts to untangle the active elements in our interventions for ADHD and other childhood behavioral and emotional disorders, whether at the level of the teacher in our consultation models, or at the level of the parent and child in our psychotherapeutic approaches.

### Whence From Here?

The studies included in this special issue add significantly to the nascent literature on teacher consultation models for ADHD and provide wonderful illustrations of how we might “unpack” and better understand our interventions. In the following we offer suggestions for future research that might build on these findings. First, as noted earlier, future studies should focus on relationship and working alliance factors between consultant and teacher. Second, this line of research should be careful to address the possible impact, cumulative effects, and interactions of consultation with other interventions (i.e., medications, therapy, one-on-one instructional aides on the classroom) that the children and families may be receiving. Likewise, school and classroom contextual factors may also capture some of

the variance in academic performance, considered in context with the factors mentioned earlier.

Third, because of the relative infancy and fragility of this area of research, we researchers may not always know where to look, or even which consultation variables to study. Thus, in addition to studying the content of sessions and the quality of interactions, we might also directly involve our participants (i.e., consultants, teachers, and families) to help us understand their perspectives on the research process and the experiences that they have had. For example, there may be some consultants and teachers in the Schultz et al. (2009) study who might have known that they were able to prevent academic failure even though the child was not improving in academic performance as measured by grades. Might this or other insights have been derived through focus groups or other forms of qualitative research? Relatedly, consultants and teachers might provide researchers insights into what motivates them to enact specific interventions with the students and their perceptions about the utility and value of the consultation models themselves.

Lastly, and perhaps most important from the perspective of developing and testing consultation models, we suggest that our field might benefit from a theoretical framework to guide our research agenda and help us understand and identify specific *mechanisms of change* in our teacher consultation models. Although the findings of Erchul et al. suggest that teacher–consultant interactions do affect the quality and effectiveness of an intervention, they do not tell us enough about when, whether, and why such effects might be found.

We suggest that a number of candidates for theoretical models are available, but underutilized. Because an effective consultation will ultimately involve changes in teachers’ behaviors, theoretical *models of behavior change* should be of great interest. Well-studied theories related to changing an individual’s behavior include social cognitive theory (Bandura, 1986), the theory of reasoned action (Ajzen & Fishbein, 1980), the theory of planned behavior (Ajzen, 1991), and the

health beliefs model (Janz & Becker, 1984). The transtheoretical model (also known as “stages of change”) addresses an individual’s readiness to change (Prochaska & DiClemente, 1983). Increasingly, experts agree on common factors for behavior change, many of which are fundamental to the most widely researched of these theories, the theory of reasoned action and the theory of planned behavior (Armitage & Conner, 2001; Fishbein, 1995). The theory of reasoned action and the theory of planned behavior have been examined in literally hundreds of National Institutes of Health funded studies of behavior change, but these are largely focused on patient behavior change. It is beyond the scope of this commentary to review the merits of this theoretical model of behavior change here, but interested readers will find a concise review elsewhere (Perkins et al., 2007). Regardless of the theoretical framework applied, the extent to which future consultation research employs such models to study the active ingredients of changes should yield great dividends.

Studies of consultation inevitably move us from the safe, firm terrain of efficacy research into the marshlands of effectiveness. In such areas it is difficult to establish a firm footing, given the number of variables at play and the difficulty in deciding what can and cannot be controlled, and even what can and cannot be studied. Although it is easy for us to wish for more studies and more variables, one of the authors (PSJ) recalls attempting to do a study that would elicit teachers’ perceptions of their own attitudes and beliefs (in addition to the child’s behavior). This will not come as a surprise to the authors of the articles related to this special topic, but that study proved quite impossible to get through school research committees and teachers’ unions. In view of such challenges, the authors of this special section deserve special accolades for excellent scientific contributions under close to impossible research conditions. Both congratulations and condolences are probably in order, knowing what they had to do to accomplish this work.

So how can we succeed, and truly mount the necessary level and type of research to

fully address the many questions? For this type of research *ever* to be feasible, we suggest that a necessary strategy will be to form research partnerships with school stakeholders (i.e., national-level, state-level, and city-level school organizations), so that the research is framed to serve the schools’ needs, and is seen by them as helpful rather than threatening. Thus, just as real-world, large-scale patient health care research becomes possible when we form partnerships with the gatekeepers of large health care organizations, might we not similarly succeed with schools if our field offered school consultation services on a large scale, just as health care organizations offer health care services? The hardest part is setting up, paying for, and maintaining such services, not studying them. Once a health care services structure becomes established, it is relatively easy for a researcher to partner with the “gatekeeper” or policy maker of that organization to conduct research in that setting, if areas of mutual interest can be identified. But who are the gatekeepers of school consultation services nationally, regionally, or even locally? Who does it on a sufficiently large scale, repeatedly, sustained over time, and for many different school organizations? To our best knowledge, a regional or national school consultation infrastructure does not exist, so each researcher who is so inclined must go out and reinvent his or her own consultation wheel, usually trying to both perform the consultation task and attempting to study it simultaneously.

To address this type of problem, a new, federally chartered nonprofit 501c3 organization was formed in 2006, the REACH Institute (Resource for Advancing Children’s Health). The ultimate objective was to provide a national infrastructure for getting evidence-based interventions out of individual universities, adapting and repackaging them for wider distribution, and under the guidance of senior researchers, disseminating them to communities nationwide. Such interventions range from school-based consultation approaches, to more traditional evidence-based psychotherapies, to pharmacotherapy. Given the goal to provide a permanent infrastructure and capacity to de-

liver training in evidence-based interventions to child-serving organizations nationwide, as services are provided on an increasing scale, REACH invites research partners to evaluate, shape, and improve these services, using state-of-the-art research methods (to learn more about partnership opportunities with REACH, go to [www.reachinstitute.net](http://www.reachinstitute.net) or call 212-947-REACH). Our hoped-for goal is that future architects and authors of studies of school consultation will merit simple congratulations and that consolation will be inappropriate!

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Date Received: January 21, 2009

Date Accepted: January 22, 2009

Action Editor: Thomas Power ■

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