Evidence-Based Practice in Psychology in Autism: A Commentary
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I was very pleased to be invited to comment about the review by McGrew, Ruble, and Smith (2016) on evidence-based practice in psychology for individuals with autism spectrum disorders (ASD). For me, working in an interdisciplinary autism center in a psychiatry department in a medical school, it was inspiring to read the perspectives of a strong team of psychologists who clearly are involved in practice as well as research. I appreciated their attempts to integrate empirically derived information about treatments with the reality of clinical and community practice. These authors showed a relatively rare respect for clinical judgment in recognizing that an experienced, well-trained psychologist often needs to provide support for hundreds of decisions that a family must make in searching for services for their child or adult with ASD. The need to base these decisions on evidence-based practice is always present, but how exactly to do this for any individual family and person with autism is much less clear.

First, I was surprised that in the article there was no discussion about the implications of empirical studies for the assessment and diagnosis of children and adults with autism spectrum disorders. I am sure this was simply a matter of lack of space, but as someone who has to defend the need for standardized assessments of children with autism to groups ranging from insurance companies to state departments of health to neuroscience researchers, the failure to mention this area was a surprising omission. Most of the standardized instrumentation and measurement of psychological, cognitive, and linguistic traits and abilities come from psychologists, but the most well-known manuals for diagnosis come from other fields that have stated policies of not wanting to burden practitioners with expectations of use of standardized measures. Psychology is at the forefront of development and dissemination of evidence-based, empirically derived measures of behaviors, symptoms, and skills. Obviously, I am biased because of my involvement in the development of these instruments and also my day-to-day clinical life, which has gained so much from being able to
systematically measure behavior, something that is at the roots of psychology.

Second, there are many barriers to better understanding and disseminating appropriate practices in ASD. Sometimes it seems that if we could put all the time and intellectual energy that has gone into reviews and Cochrane reports and AHRQ lists into designing and carrying out better, large-scale studies, then we might know more than we do when we repeatedly recount the limits of small-scale studies with clear methodological limitations. One consistent barrier, highlighted by McGrew et al. (2016), is the lack of standard outcome measures. I think this is a place where psychologists in particular could help greatly. Part of the difficulty comes from the random or sometimes stubborn use of problematic measures, particularly by clinical communities. But part of the difficulty is that better measures do not necessarily exist. The problems with placebo effects, biased reporting by parents, semi-unblinded coding by practitioners, and the question of how to capture short-term and long-term changes in many behaviors that are difficult to quantify easily or rapidly are real. Luckily, there have been mandates from federal agencies and calls for proposals from private funders to address this need. Speaking as someone in the middle of trying to develop a better observational measure of behavior change, this is not an easy task, particularly in an intellectual and funding environment that rewards “high-impact” simplistic answers over slower, more methodical progress, and documented feasibility.

Another barrier is the need to work across disciplines. I second the call from Hollon (2015) that we need to move beyond the territorialism of different fields to develop interdisciplinary ways in which families can find out information about treatments, including psychopharmacology and those carried out by other disciplines (e.g., speech language pathologists, occupational therapists), as well as psychologically based treatments. The efforts of the Autism Evidence-Based Practice Review Group led by Odom to identify treatment strategies, rather than named treatments, are a step in the right direction, but we need to consolidate the broader perspectives of the current article (McGrew et al., 2016) with the practical knowledge that insurance companies and school systems tend to support “named” approaches, not the different strategies that define them.

An additional challenge or barrier is that reviews of empirically supported treatments or evidence-based practices in psychology and other disciplines each emerge from different historical and political contexts, sometimes with different purposes. This is a factor that was noted in the present article (McGrew et al., 2016) and which has real consequences. Reviews from the UK and most of the EU often occur within single-payer systems where the goal is to decide that a particular treatment such as “CBT” (whether on the Internet, in a group, or one-to-one) is something a national health service should fund. As McGrew et al. (2016) note, there is little evidence that a “named” treatment or strategy will be equally effective across modalities, across different providers (within academic sites and outside), and across populations. In the USA, such decisions quickly become entangled with who should be allowed and reimbursed to administer the treatment and, from the point of view of insurance companies, who is the least expensive provider. Attention to what the goals were behind a particular review, what it is trying to accomplish, and for whom seems very important. In the case of the McGrew et al. article (2016), the consideration of how psychologists fit into these findings added a unique perspective.

Finally, a barrier that was not addressed directly, but I believe is very much present, has been the lack of interest of the U.S. National Institutes of Health in behavior in general and research about changing behavior in particular. The number of grant applications to committees reviewing behavioral interventions has fallen steadily as funding policies have shifted from clinical relevance to an emphasis on biologically based principles that can be applied across species. Such policies arose out of understandable frustration about the slow pace of advances both in behavioral research and, even more so, in biomedical research in the development of new drugs to treat psychological and psychiatric disorders. Funding for research that is solely behavioral is often small and not on a scale that would allow large samples and careful cross-site fidelity, at least in the USA. “Behavior” is more and more often considered an unfortunate component of a disorder that only slows us down in finding the true
neurobiological pathways (from animal models to humans) to human psychiatric and developmental problems. The fact that the problems at hand usually have to do with behavior and learning often seems lost. In addition, while the move to more of a focus on dimensions than categorical diagnoses has much merit in many ways, the value of a treatment carried out on a poorly defined group of participants is very unclear, and to quantify all possibly relevant dimensions is expensive and not usually done.

So, from all this, what are the implications for clinicians and practitioners of the current state of evidence-based practice in psychology? The authors here (McGrew et al., 2016) make a cogent case of considering the importance of nonspecific factors in treatments, which, much to the dismay of many treatment researchers, can account for a significant proportion of their impact on families and individuals. The need to better define these nonspecific factors and deliberately control them within studies is also stated. Similarly, the authors stress the need for consideration of breadth, and I would add length of training and experience, for psychologists in dealing with different treatments and different populations. For these contributions of our field to have much impact, though, compared to documents such as the DSM and other American Psychiatric Association publications, there needs to be more targeted research and much clearer dissemination beyond published reviews. How this should happen is not clear, but seems like a challenge for the American Psychological Association as well as other professional groups. Division 53’s website, https://effectivechildtherapy.org, is a good first step, although even this resource is simplistic in its recommendations and descriptions of treatments, based on a traditional, but very competent review by Smith and Iadralo (2015).

Needs for research outside the “easier” populations of school-age, verbal children with autism able to come to short-term groups, and small children eligible for early intervention, are also very clearly stated by McGrew et al. (2016). As they stated, there is a need to address other disorders that are frequently comorbid with autism, and to include a wider population of participants, such as adults, older adolescents, minimally verbal or nonverbal children, and adults and females.

Finally, I wanted to end with more optimistic statements about what has changed in the last 15 years since the National Academies of Science/National Research Council published our committee’s report (National Research Council, 2001). Although the questions arising from research about what works for whom are no different now than 15 years ago, there have been considerable gains in the research available for scrutiny (Bolte, 2015). These include many more RCTs (Smith & Iadralo, 2015), much better descriptions of participants, which allows for more interpretable findings and eventual meta-analyses, and better research designs with expectations that group designs meet broad, international (CONSORT) requirements.

There is much more direct attention to the role of development, factors such as age and language level of the child, culture of the family, and implementation issues than before. There are clear efforts to bridge what was a huge gap 20 years ago between developmental and behavioral approaches, including the development of a group that proposes “naturalistic, developmental, and behavioral interventions.”

There is still tension about the particular role of single-case studies. From my point of view, there are research questions that cannot possibly be addressed by single-case studies, and there are research questions for which well-designed case studies can offer important information, particularly if the “risk of bias” is acknowledged. We have moved forward and will continue to do so in the development and evaluation of evidence-based treatments. I believe the authors of this article (McGrew et al., 2016) are correct, in that we are still very much dependent on the insight and knowledge, both of individual providers working with a family and of the authors of reviews and meta-analyses, in giving us a useful picture of the clinical research in our field. I am grateful to these authors and Divisions 12 and 53 for doing so.

REFERENCES


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