

Word from the President
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SERVICE AND SCIENCE: A POWERFUL COMBINATION

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Why did you and I choose to become psychologists? What attracted us to this field? What is distinctive about our profession? When I think of questions like these two concepts emerge: 1) a commitment to service, and 2) a commitment to science.

A Commitment to Service

Without a doubt many of us “do-gooders” selected careers as psychologists to help others, to serve others. PPA concurs with this in its very Mission Statement. “The purpose of the Association shall be to advance psychology in Pennsylvania *as a means of promoting human welfare.*”

Many of the great religions of the world consistently support the value of service. Man’s relationship and obligation to God are often expressed in terms of responsibility toward others. Martin Luther King, Jr. preached a sermon in 1968, the “Drum Major Instinct” in which he discussed man’s desire for recognition and attention. He acknowledged Adler’s original contribution to this concept. Rather than suppressing or rejecting that basic desire, King emphasized the value of using that desire constructively: His words - “You want to be first, great, significant? You ought to be. You must be. Be first in love. Be first in moral excellence. Be first in generosity. Everybody can be great, because everyone can serve.” Others have defined service as the core characteristic of being truly human. Shirley Chisholm said, “Service is the rent you pay for room on this earth.”

Professional psychology has a long list of very specific and concrete ways of serving others. Participating in disaster relief work is a prime example. On 9/12/01, the day after the historic event in our country, Simone Gorko and Sal Cullari put out a request via our PPA internet list for volunteers to help in New York City. On the very first day of this notice, over 300 PPA members volunteered to serve – so many that we could not handle the volume of responses that first day. This means that over 10% of our members immediately responded that they would pack-up, leave their families, leave their practices or work and answer the call to serve. I’m not surprised and I’m sure you are not. That’s who we are and how we define ourselves.

One of our current PPA priorities is to get legislation passed to allow psychologists to independently admit patients to hospitals. I would suggest to you that this goal is worth our continued efforts **only** to the extent that we truly believe our patients will be better served if this bill passes. I believe that and so I remain committed to this cause. Other causes like Mental Health Parity or Prescription Privileges for Psychologists are justified only to the extent that they will allow us to serve others more effectively.

It is clear that psychologists were not the first to discover the value of serving others; yet, we have whole-heartedly embraced that value.

A Commitment to Science

Every year in the Kettlewell household on the first snowfall of the year that covers the grass, we run around the outside of the house barefoot in the snow. We do so in order to keep us healthy. Of course we know it works! How? Well, if you get a cold, had you not run around the house barefoot you would have gotten a cold sooner, had more severe symptoms, or even gotten pneumonia. If you get pneumonia had you not run around the house you would have gotten pneumonia sooner or you would have even died. If you die, you would have died sooner. You get the gist. It works. We know it works!

But, is this science? It hardly meets the criterion identified by the philosopher of science, Popper, - that of falsifiability. You can't disprove the Kettlewell approach. It works, we know it works!

I would suggest that what distinguishes us psychologists from the long list of other fine "do-gooders" is that we are scientists. We value, collect and use data. We conduct falsifiable experiments to answer questions and help us serve our fellow man better. I believe all psychologists have an **obligation** to be participants in our science and at minimum be good consumers of and be guided by our science, including those of us who practice and those of us who teach or train others. Why? Because our science informs us and guides us about how to serve others better. We have a cabin on a lake in Sullivan County – a great place to restore oneself. That lake remains healthy and vibrant because it is consistently fed fresh water. I believe our science is the fresh water that will keep psychology vibrant and alive. For psychology to thrive, science must keep informing us.

So where's the controversy? There is a movement within psychology for the past 10 years or so advocating for the use of evidence-based treatments. This movement is well under way in other areas of healthcare also.

Some resistance to that movement comes from those who think that there is not enough evidence to make firm conclusions. Also, it has been suggested that valuable treatment approaches (such as family therapy or psychodynamic psychotherapy which are not easily researched or have not yet been well researched) may not be encouraged or even permitted in restrictive health care settings.

Let's first look at a sample of some of the evidence. We have clear evidence, for example, that psychological treatments for anxiety are efficacious and effective. Researchers like Barlow, Kendall, and Silverman have established a large body of data to indicate that in many situations, psychological treatments for anxiety are the most effective and powerful approaches.

Likewise, the body of data about psychological treatments for depression is positive and impressive. A recent large scale cognitive-behavioral treatment study sponsored by NIMH produced these results: cognitive behavior therapy for depression works as well as medication,

sustains improvement longer than the use of medication, and costs no more over the long run (Begley, 2002). However, we know that during the past decade there has been an increase in the use of drug treatment for depression and a decrease in the use of psychotherapy (Olfso et al., 2002). We need to get the message out: We have treatments that work!

John Weisz, a leading research psychologist, has demonstrated very substantial results for the efficacy of child psychotherapy. Efficacy studies, in contrast to effectiveness research, are those conducted in highly controlled settings, with homogeneous populations. Weisz et al. (1995) found that effect sizes for four meta-analyses (representing many studies) ranged from .71 to .88. This indicates that we clearly have treatments for children and adolescents that work and the strength of the treatments is at a high level. In contrast to that, I take an aspirin and cholesterol lowering medicine daily, both of which are recommended but are in the small effect size range. Weisz' review of efficacy studies is impressive and clearly good news.

However, the results from treatment outcome studies with children conducted in applied settings (effectiveness research) are not so encouraging. The results of the meta-analyses of these studies by Weisz et al. (1995) indicate effect sizes ranging from -.40 to +.29. We have much work to do in applied settings. PPA's Practice Research Network is one appropriate example of a worthy effort to address that need (Ragusea, 2002).

A second and frequently stated objection to evidence-based treatment approaches is related to the fear that insurance companies (managed care) will use research against us to inappropriately limit what treatments they will pay for. Managed care has been arbitrarily restrictive and abusive in the past and most likely will continue such behavior. But this is our domain. We are the most qualified scientists to conduct and evaluate treatment outcome. Let's not get passive. Are HMOs or drug companies best equipped to conduct and evaluate psychotherapy outcome research? Hardly. This is our domain and let's not let anyone take it from us.

A third objection to the evidence-based treatment movement comes from those who argue that the largest percentage of variance with treatment outcome comes from relationship factors rather than specific treatments or techniques. Advocates of this position, like Ahn and Wampold (2001), have suggested we need to develop evidence-based relationships rather than evidence-based treatments. Some have suggested pitting evidence-based treatments vs. evidence-based relationships. I contend that this is a false and unnecessary choice.

Practitioners and those of us in training settings must be aware of the large body of data about the power of relationships because the evidence compels us to consider these factors. To ignore this would be irresponsible.

Similarly, psychologists must be aware of the large body of data about specific treatment approaches being efficacious. An example is the evidence from the MTA (1999) study and other research regarding ADHD. Is it acceptable to treat ADHD kids with dietary changes, anti-psychotics, or non-directive play therapy when no evidence exists to support those approaches and we have evidence that other approaches like stimulant medication and behavior therapy work?

Is it acceptable for a first grade teacher, like my wife, to teach reading using a “whole language” method without any phonics instruction when a compelling body of evidence indicates phonics instruction is superior (*The Economist*, 2002)? When my wife’s school district selected a curriculum based solely on “whole language” instruction my wife simply supplemented that curriculum with the use of phonics. Her experience taught her that, but the data also was clearly on her side.

Is it acceptable for the Commonwealth of Pennsylvania or a school district to use tax revenue to implement the DARE program when there is absolutely no evidence that DARE works to prevent drug abuse?

Is it acceptable for the State of Pennsylvania to fund lots of TSS and wraparound services for kids without even asking and evaluating whether these services work? There is currently an effort to restrict these services to kids because it is costing the Commonwealth of Pennsylvania too much. How about simply asking questions about what services are effective for which type of problems, and then decide how to cut costs?

Will it be acceptable for the prescribing psychologists in New Mexico to choose whatever medication they prefer to use to treat a particular disorder, and ignore the research about efficacy and outcome?

We expect and want data to guide us in many areas. Those whom we serve deserve that from us. This issue speaks to me as a practitioner and a clinical teacher. Measuring treatment outcome is vital for our profession. In a recently very well designed study, Lambert et al. (2001) demonstrated that just the process of measuring treatment outcome and giving feedback to therapists improves outcome for patients.

The Practice Research Network, developed by Tom Borkovec and Steve Ragusea, and supported by PPA and APA, is an excellent example of effectiveness research. I had the good fortune of attending their last meeting. I was impressed and proud of psychology. I witnessed full-time practitioners and full-time academics actively discussing, negotiating, and agreeing on how to systematically evaluate treatment outcome. These folks are pioneers and role models. We need to support and extend the PRN. It is among the most important things we are doing.

I believe so strongly that we need to help practitioners more successfully use science that as PPA President I will take the opportunity to form a Task Force, “Helping Practitioners Use Science,” whose charge will be to generate specific and concrete suggestions for what PPA can do to assist practitioners to use science to guide practice. Several practitioners and academics have already volunteered. Some good ideas are already percolating.

I would suggest to you that the tent that houses psychologists is very large and inclusive; however, we don’t have room for those who don’t value empiricism. Our science is a vital part of who we are. Feel free to argue that some of our data are insufficient, flawed methodologically, or used prematurely; but, don’t argue that data doesn’t matter – that I can practice however I want - disregarding the evidence.

I am proud to be a psychologist and I believe our profession is ideally suited for the future because we have two important core values. Service and Science form a powerful combination. Please join me in supporting our profession and PPA.

References

- Ahn, & Wampold (2001). Where, oh where are the specific ingredients? *Journal of Counseling Psychology, 48*, 251-257.
- Begley, S. (2002). In NIMH study, therapy works as well as drugs for depression. *Wall Street Journal*, May 24, 2002.
- Jensen, P.S., et al. -The MTA Cooperative Group. (1999). A 14-month randomized clinical trial of treatment strategies for attention deficit/hyperactivity disorder. *Archives of General Psychiatry, 56*, 1073-1086.
- Lambert, M.J., Whipple, J.L., Smart, D.W., Vermeersch, D.A., Nielsen, S.L., & Hawkins, E.J. (2001). The effects of providing therapists with feedback on patient progress during psychotherapy: Are outcomes enhanced? *Psychotherapy Research, 11*, 49-68.
- Olfso, M., Marcus, S., Druss, B., Elison, L., Tanelian, T., & Pincus, H. (2002). National trends in the outpatient treatment of depression. *JAMA, 287*, 203-209.
- Pennsylvania Psychological Association Strategic Plan, June 2001. Unpublished manuscript.
- Ragusea, S.A. (May 2002). Pennsylvania Psychological Association's Practice Research Network, Phase II. *Pennsylvania Psychologist, 62*, 18.
- Social science: Try it and see. (2002). *The Economist*, March 2, 2002, 73-74.
- Weisz, J.R., Donenberg, G.R., Han, S.S., & Kauneckis, D. (1995). Child and adolescent psychotherapy outcomes in experiments versus clinics. Why the disparity? *Journal of Abnormal Child Psychology, 23*, 83-106.
- Weisz, J.R., Donenberg, G.R., Han, S.S., & Weiss, B. (1995). Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology, 63*, 688-701.
- Weisz, J.R., Weiss, B., Han, S.S., Granger, D.A., & Morton, T. (1995). Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcome studies. *Psychological Bulletin, 117*, 450-468.