Editorial

The Scientist-Practitioner and the Scholar-Practitioner Models in Psychology

Marius Drugaș*a

[a] Department of Psychology, University of Oradea, Romania.

Abstract

Literature and personal experience identify a gap between researchers and practitioners in the field of psychology. At least two models are trying to explain how training programs for future psychologists should integrate science and practice. The scientist-practitioner model often emphasizes research and aims to develop scientific, critical thinking, with results being published in international journals. It is mainly criticized by practitioners for offering statistical solutions and neglecting particular cases or contexts. The scholar practitioner model provides opportunities for students whose career purposes are focused on professional practice and focuses on the development of skills that can be used in the relations with clients. It is mainly criticized for neglecting recent knowledge obtained through advanced research and favoring personal experience and insight instead. However, many aspects of practice are scientifically defensible, and many scientific results can improve practice in psychology. Good science and good practice should go hand to hand, but an exact evaluation of the percentage of science vs. practice in our daily activities would be forced and artificial.

Keywords: scientist-practitioner model; scholar-practitioner model; local scientist model.

Table of Contents

My personal experience as a psychologist, teacher, and researcher revealed an increasing gap between researchers and practitioners in the field of psychology. Many professionals identify themselves as mainly researchers, avoiding the organizational, clinical or educational practice, and many professionals identify as practitioners, avoiding to conduct scientific research. Only few of them are trying successfully to integrate both science and practice in their activity.

The existing gap between researchers and practitioners was identified in many applied fields, not only in psychology (Kormanik et al., 2009), especially when „pure scholars" and „pure practitioners" were compared (p. 486).

However, specific for the field of psychology, all professionals should commit to both science and practice, trying to use the scientific method to conduct research and improve their professional practice. This attitude towards the professional activity should be cultivated early, during the training years for the profession. There is a need for developing or improving academic programs that should lead to better student learning and development (Erwin & Wise, 2002), especially considering the plethora of trends in psychological science and practice.

Searching for models that could be used both as philosophical and practical grounds for training, the scientist-practitioner model is the first that comes to mind, although there are some competing models trying to illustrate how science and practice could be integrated.

The scientist-practitioner model

Starting with the discussions at the Conference on Graduate Education in Clinical Psychology that took place more than 70 years ago in Boulder, and continuing with the APA

guidelines for training would-be psychologists, the integration of science and practice was considered a must for all training programs (LeJeune & Luoma, 2015; Petersen, 2007), not only for clinical psychology. In time, the scientist-practitioner or the so-called Boulder model became a model of education and training, much more than a simple model of professional practice (Shapiro, 2002).

According to the Boulder model, students should learn how to apply the scientific method and practice techniques and skills, to conduct scientific research and clinical practice, under supervision from teacher and experts who are usually also involved in both research and practice (Hays-Thomas, 2006). In other words, we should expect from graduate psychologists to utilize scientific data *and* produce scientific results, usable in everyday practice.

Students enrolled in programs based on the scientist-practitioner model should develop a didactic-scientific component (i.e., advanced knowledge on normal and abnormal behavior in the domains of the program), a didactic practice core (i.e., to integrate knowledge with practice, learning to communicate during seminars, making decisions about assessment and interventions), a scientific experiential component (i.e., using knowledge and experience to conduct research), and a professional practice experiential core (i.e., using knowledge into practice, understanding ethical problems, engaging in supervised relations with clients) (Tanner & Danielson, 2007).

The programs based on the scientist-practitioner model emphasize scientific thinking and research and are usually supported by large universities, for which the infrastructure (i.e., research laboratories, devices intended for research etc.) or the publishing fees are not of great concern. The admission criteria often include traditional measures of academic aptitude (Roșeanu & Drugaș, 2011), and one important aim of these programs is to develop an attitude of scholarly inquiry (Stoltenberg et al., 2016). So, the students are trained to identify research problems, formulate hypotheses, collect relevant data, systematically test the hypotheses, and translate the new acquired knowledge into the scientific world, by publishing the results.

The pressure to publish the results of research is easy to understand. In many countries, at least some part of the institutional funding in higher education is based on the quality and credibility of the learning outcomes (Erwin & Wise, 2002), visible in high-ranked, peer-reviewed journals. At least for the clinical psychology, a small number of researchers working

or retired from the academia are responsible for a majority of published studies in international journals (Richardson, 2009).

But there is more to the model than scientific research. The scientist-practitioner should be able to apply psychological practice to his/her practice, using a scientific attitude and be able to provide practiced-based evidence, by testing hypotheses regarding the client, reformulating ideas in the face of evidence and reflect on the impact of his/her work (Blair, 2010). So, the psychologist should identify if there is an agreement on the best intervention for a person or group, if this intervention has been transmitted to students in training or practitioners, and if they will be able to apply the intervention effectively.

This scientific practice in psychology should include a variety of skills. Some of them are required for gathering information in a critical manner, other to formulate and test hypotheses, offer alternative explanations or selecting the appropriate intervention.

Nevertheless, there are some critiques to this model. Practitioners often expressed their reservations about the scientist-practitioner model, because some results of research are seen as inapplicable to practice (Shapiro, 2002). So, there is a need for a renewal of the scientist-practitioner model, by developing core competencies for students training in this model (Shapiro, 2002): protocols should be used for delivering assessments and interventions, healthcare decisions should be based on scientific findings, effective teamwork with other healthcare professionals should be encouraged and based on research-based training for psychological care.

The scientists should not infer that if research is of high quality and the scientific method was used, then it will automatically have implications for practice (Rupp & Beal, 2007).

Hays-Thomas (2006) acknowledged that the core characteristics of the scientist-practitioner model are seldom enacted into the training programs, leading some authors to even mention the failure of the Boulder model. For example, Lowman (2012) mentioned that translating the scientific literature into practice is a complex task, as well as conducting research that can be translated into practice. Other evidence showed that trained specialists decreased their research efforts after graduation (Stoltenberg et al., 2016).

Although there is a tendency for all students in Psychology to be trained in a scientist-practitioner model, different approaches were identified (Stoltenberg et al., 2016). In the fields of clinical and counseling psychology, there is a tendency to emphasize science more, and in school psychology to emphasize the practice of psychology. In other words, some

programs are more willing to develop research skills, and other to develop practitioner skills. So, an alternate model was developed, starting from the 1970's: the scholar-practitioner model.

The scholar-practitioner model

The daily experience continues to show that real integration remains a simple desiderate, because in most situations the private practice offers little opportunity to conduct psychological research. In fact, most of the psychological research is produced by professionals working in the academia, in some cases with limited or no practice (LeJeune & Luoma, 2015). So, the apparition and the perpetuation of a gap between the producers of scientific knowledge and the practitioners seem inevitable.

One of the core assumptions of the scholar-practitioner model is that the graduates of programs based on the scientist-practitioner model are not properly prepared for practice (Hays-Thomas, 2006). The origins of the model can be traced to the Veil conference in 1973, and it is often supported by smaller universities, with a greater concern for teaching and developing skills that will be of great use in the direct relation with clients (Stoltenberg et al., 2016). The admission criteria consider the suitability for practice, rather than the statistical skills, thus providing an opportunity for students whose career purposes are focused on professional practice. Without neglecting the scientific method, because practice needs a scientific foundation, the emphasis during training is on practice activities and mentoring.

The problem is that after graduation practitioners find little use for research, published findings being often neglected as a source of information (Stoltenberg et al., 2016), because the particular cases of clients are rarely encompassed in statistical models. Instead, clinical judgment, professional experience, authoritative prescriptions or even clinical lore are favored.

As such, practitioners are assigned the role of appliers, rather than contributors to knowledge (Stoltenberg et al., 2016). This is not to be taken lightly, because their tasks are becoming difficult, if not impossible: to be aware and read new scientific literature as it is generated, change their practices based on reliable findings, contribute to practice-relevant literature, and act with caution if data from practice exceeds that from research (Lowman, 2012). As research doesn't always focus on practical applications and as particular clients cannot be put on hold until research covers their problems, the task of practitioners becomes

increasingly difficult. There are situations where answers for particular cases are not to be found into the extant literature.

With the practitioners' interests in research being, at best, ambivalent, developing a research culture in programs based on the scholar-practitioner model could be a challenging task. A research culture should be developed since the early years of training; students who learn to conduct research will be more able to understand the value of published research for their practice.

Still, let us not forget that practitioners produced valuable and legitimate knowledge, based on experience and reflection. This type of knowledge, perhaps lacking the scientific method, is often displayed in workshops and conferences, but is generally neglected by scientific journals. However, there are certain benefits for practitioners to conduct research, even if they are outside of an academic setting. For example, they are free from external constraints and bureaucracy, can focus on practical impact, integrate science and practice, and improve clinical practice (LeJeune & Luoma, 2015).

Perhaps the main problem of the scholar-practitioner model is the risk for practitioners to neglect scientific evidence and ground their decisions on personal experience or rule-of-the-thumb procedures, leading to risky or even unethical decisions. When practitioners are not using scientific evidence for their work, then clinical experience is nothing more than personal opinion.

Other models

Perhaps the scientist-practitioner model tries too hard to tie together two types of activities that are simply too different to reconcile. Some suggest that, instead of forcing this blending, practitioners should act as local scientists, building knowledge that is specific to a small community and/or a limited context (Savickas, 2000). This knowledge would be based on the analysis, needs, dialogues and practical problems faced by the local clients.

The local clinical scientist model was developed in the 1990's to describe the use of the scientific method and professional experience to develop explanations and solutions for local phenomena (Hays-Thomas, 2006). The specialist is not simultaneously involved in research and practice, but is able to value the empirical support, to critically evaluate it, to avoid personal biases and design interventions for a specific context, in the local community. The same critical thinking that a scientist is using in his/her research should be used by the local clinical professional to approach practice issues (Richardson, 2009).

Another model is the *developmental scientist-practitioner model* (Stoltenberg et al., 2000; Stoltenberg & Pace, 2007). In this model, *developmental* refers to the continuous learning in different contexts, *scientist* means using critical thinking and the scientific method, and *practitioner* refers to the concern for training counseling psychologists.

Although these are lesser-known models, they benefit from the support of scientists and practitioners, and we will see if they will hold their value in time.

Conclusions

For the future to-be psychologists, it is questionable if at the beginning or even during their training they can develop interest and abilities for both research and practice. The differences in choosing to favor the scientist or the practitioner sides in developing a career could be founded on the personality type. For example, Savickas (2000) concluded that the practitioners resemble mostly the *social* type from Holland's theory, and the scientists resemble the *investigative* type.

During their graduate programs and afterwards, it would be nearly impossible to train practitioners that will be aware of the benefits of state-of-the-art research and researchers that will be aware of the daily harasses of clinicians with their clients (Maddux & Riso, 2007).

As for any other models, the relevance of the scientist-practitioner and the scholar-practitioner models may be questioned because putting them into practice *per se* may prove difficult. An exact evaluation of the percentage of science vs. practice in our daily activities would be forced and artificial.

The self-evaluation of some professionals as pure researchers or pure practitioners led to some hilarious stereotypes. For example, the members of the academia tend to perceive themselves as intellectually superior, compared to their practitioner colleagues, and the practitioners tend to see the researchers as living in „ivory towers" (Wasserman & Kram, 2009).

Perhaps we are far from the ideal situation when all decisions taken by practitioners in their daily activity will be supported by evidenced-based science; for example, Lampropoulos (2000, as cited in Richardson, 2009) identified that almost 400 different psychotherapeutic procedures in use were not empirically tested at that time. Nevertheless, we should be aware that many aspects of practice are scientifically defensible. Good science and good practice

should go hand to hand. So, before selling someone our business, we should *know* our business.

Even if it is unrealistic and, at best, difficult to implement, the scientist-practitioner model dominates the field of psychology, because it still is the best approach for training students to become effective professionals (Stoltenberg & Pace, 2007).

Competing Interests
The author is a member of the Editorial board of Psychological Thought.

References

Blair, L. (2010). A critical review of the scientist-practitioner model for counselling psychology. *Counselling Psychology Review*, *25*(4), 19-30.

Erwin, T. D. & Wise, S. L. (2002). A scholar-practitioner model for assessment. In T. W. Banta (Ed.), *Building a Scholarship of Assessment* (pp. 67-81). Jossey-Bass.

Hays-Thomas, R. (2006). Challenging the scientist-practitioner model: Questions about IO education and training. *The Industrial-Organizational Psychologist*, *44*(1), 47-53.

Kormanik, M. B., Lehner, R. D., & Winnick, T. A. (2009). General competencies from the HRD scholar-practitioner: Perspectives from across the profession. *Advances in Developing Human Resources*, *11*(4), 486-506. https://doi.org/10.1177/1523422309344170

LeJeune, J. T., & Luoma, J. B. (2015). The integrated scientist-practitioner: A new model for combining research and clinical practice in fee-for-service settings. *Professional Psychology: Research and Practice*, *46*(6), 421-428. https://doi.org/10.1037/pro0000049

Lowman, R. L. (2012). The scientist-practitioner consulting psychologist [Editorial]. *Consulting Psychology Journal: Practice and Research*, *64*(3), 151-156. https://doi.org/10.1037/a0030365

Maddux, R. E., & Riso, L. P. (2007). Promoting the scientist-practitioner mindset in clinical training. *Journal of Contemporary Psychotherapy: On the Cutting Edge of Modern Developments in Psychotherapy*, *37*(4), 213-220. https://doi.org/10.1007/s10879-007-9056-y

Petersen, C. A. (2007). A historical look at psychology and the scientist-practitioner model. *American Behavioral Scientist*, *50*(6), 758–765. https://doi.org/10.1177/0002764206296453

Richardson, T. (2009). Challenges for the scientist-practitioner model in contemporary clinical psychology. *Psych-Talk*, *62*, 20-26.

Roșeanu, G., & Drugaș, I. M. (2011). The admission criteria to the university as predictors for academic performance: A pilot study. *Journal of Psychological and Educational Research*, *19*(2), 7-19.

Rupp, D. E., Beal, D. (2007). Checking in with the scientist-practitioner model: How are we doing? *The Industrial-Organizational Psychologist*, *45*(1), 35-40.

Savickas, M. L. (2000). Developing a scholar-practitioner model for career practice and research. *Career Research and Development: The NICEC Journal*, *1*, 3-5.

Shapiro, D. (2002). Renewing the scientist-practitioner model. *The Psychologist*, *15*(5), 232-234.

Stoltenberg, C. D., & Pace, T. M. (2007). The scientist-practitioner model: Now more than ever. *Journal of Contemporary Psychotherapy: On the Cutting Edge of Modern Developments in Psychotherapy*, *37*(4), 195-203. https://doi.org/10.1007/s10879-007-9054-0

Stoltenberg, C. D., Pace, T. M., Kashubeck, S., Biever, J. L., Patterson, T., & Welch, I. D. (2000). Training models in counseling psychology: Scientist-practitioner versus practitioner-scholar. *The Counseling Psychologist*, *28*, 622-640.

Stoltenberg, C.D., Pace, T.M., Kashubeck-West, S., Biever, J. L., Patterson, T, & Welch, I. D. (2016). Training models in counseling psychology: Scientist-practitioner versus practitioner-scholar. *The Counseling Psychologist*, *28*(5), 622–640. https://doi.org/10.1177/0011000000285002

Tanner, P. L., & Danielson, M. L. (2007). Components necessary for the preparation of the scientist-practitioner. *American Behavioral Scientist*, *50*(6), 772–777. https://doi.org/10.1177/0002764206296455

Wasserman, I. C., & Kram, K. E. (2009). Enacting the scholar-practitioner role. An exploration of narratives. *Journal of Applied Behavioral Science,* *45*(1), 12-38. https://doi.org/10.1177/0021886308327238

About the author

After graduating with a degree in psychology from the University of Oradea, Romania, **Marius Drugaș** began his university career as a trainer, then continued as an assistant and lecturer, and in 2014 he became an associate professor. He completed his doctoral studies in psychology at the "Babeș-Bolyai" University, Cluj-Napoca. His teaching and research interests focus on personality psychology, organizational psychology, video game psychology, and the phenomenon of radicalization. He is one of the executive editors of the *Romanian Journal of School Psychology* and the *Psychological Thought*.

Corresponding Author's Contact Address [TOP]

Universitatii Street, no 1, Department of Psychology, Oradea, 410087, Bihor, Romania.

Email: mdrugas@uoradea.ro