Evaluating Psychologist Practice Competencies through Multisource Feedback: An International Research Design

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Abstract—Effective practicing psychologists require ongoing skill development that is constructivist and recursive in nature, with mentor, colleague, co-worker, and patient feedback critical to successful acquisition and maintenance of professional competencies. This paper will provide an overview of the nature and scope of psychologist skill development through multisource feedback (MSF) or 360 degree evaluation, present a rationale for its use for assessing practicing psychologist performance, and advocate its use in psychology given the demonstrated model utility in other health professions. The paper will conclude that an international research design is needed to assess the feasibility, reliability, and validity of MSF system ratings intended to solicit feedback from mentors, colleagues, coworkers, and patients about psychologist competencies. If adopted, the MSF model could lead to enhanced skill development that fosters patient satisfaction within and across countries.

Keywords—Psychologist, multisource feedback, psychologist competency, professionalism.

I. INTRODUCTION

ONGOING psychologist skill development beyond formal training experiences is critical for optimal service delivery to consumers. As a result, practitioners must learn through experience and feedback, making the continuing education experience both constructivist and recursive in nature to ensure continued psychologist competency. Although multi-source information (360–degree feedback) has been applied in business models to assess professional performance [1] and used within the health field to assess the health care professional competencies [2], its use in psychological practice has been limited. This systematic multi-source feedback approach has been recommended for psychologist training [3], utilized to assess client outcomes from psychotherapy [4], and recommended for assessment of practicing psychologists [5], [6], yet a multi-source feedback (MSF) system as a systematic way to assess the practice of psychologists has yet to be adopted anywhere in the world. A sign of the health of a profession is its ability to regulate itself, yet without methods to establish professional competency beyond initial training, the psychology profession could be considered in a nascent stage of development.

Psychologists are generally considered to be competent if they have the knowledge, practice skills, communication

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skills, and professionalism for practice (e.g., assessment, intervention, consultation; [7]). The psychology profession has established foundations and criteria for determining professional competence including ethical principles and standards of practice [8], [9]. However, there is still lack of consensus about how to evaluate or measure the performance and competence of practicing psychologists beyond initial training experiences. Even entry-level licensure examinations focus on psychological knowledge instead of practice, as if the two can be equated.

Currently, the primary method used by practicing psychologists to evaluate their performance, competence and professional developmental needs is self-assessment [10], [11]. Typically, psychologist self-assessment is more qualitative than quantitative. It involves self –reflection and evaluation of one's professional strengths, need for improvement, and professional or personal limitations, as well as how professional development needs will be addressed [12], [13]. A major problem with self-assessment as a means to determine practitioner competence is that few self-assessment measures have adequate reliability and validity, and so it should not be surprising that they do not correlate well with peer and/or supervisor ratings or other performance measures [14]-[17]. Ensuring public safety and validating licensure or registration by psychology boards is too important to be left to qualitative self-assessments or assessment tools with poor reliability or validity [5]. Moreover, there is no validity evidence that psychologists effectively use self-reflection or self-assessment of continuing education experiences as a means for developing competence [18], suggesting significant changes in monitoring of professional psychologist competency is needed.

Clearly, professional psychology lags behind other health professionals for monitoring of continuing competence after licensure, and how this absence of criterion-related validity impacts public perception of practitioners and the field [19]. However, within the past few years, the psychology profession is considering, developing, and implementing valid, reliable, and feasible performance assessments in order to inform licensed psychologist practice and improve public accountability [20], [21]. To this end, Kaslow et al. [22] published a competence assessment toolkit for professional psychology in which various instruments along with information regarding their psychometric properties were reported. Multisource feedback (MSF) or 360 degree evaluation was included as one of the methods examined in

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the assessment of broader psychologist practice competencies. MSF relies on aggregate data from ratings completed by psychologists, patients/clients, colleagues (such as peers and referring psychologists), and co-workers (such as counselors, social workers) to provide feedback about individual psychologist performance. Its purpose is to guide self-development by providing feedback about observable behaviors that can be analyzed, evaluated, and modified to further practitioner competency.

In a systematic literature review of multisource feedback instruments, and their feasibility, reliability, generalizability, and validity, Andrews at al. [5] reported that MSF tools have been successfully used to evaluate most medical specialties (e.g., obstetrics and gynecology, internal medicine, emergency medicine, psychiatry), but can also address more generalist practitioners, such as pediatricians and primarily care physicians. These domains assessed in these MSF studies included clinical competence, communication, case management, interpersonal relations, and overall assessment. Andrews et al. noted MSF feasibility was determined to be good to very good, internal consistency (Cronbach's α) of MSF measures was high (α≥0.90) and that generalizability/ reproducibility coefficients (Ep^2) were reported as adequate with 8 or more raters (i.e., $Ep^2 \geq 0.70$) in most studies. In addition, there was substantial evidence of content validity, criterion-related validity, and some evidence of construct validity of the MSF instruments for the medical profession studies. In addition, the MSF system had very good response rates (i.e. >70%) and was generally considered to be cost effective in the studies reviewed. Lastly, the empirical review indicated that MSF can be conducted effectively by relatively few raters (8 to 10 colleagues, co-workers, 25 patients/clients) and MSF instrument completion time for raters was about 6 minutes or less. Importantly, practitioners reported the MSF system benefited their practice for personal/professional development by helping them focus learning activities to legitimate needs and better multidisciplinary team collaboration and communication [23].

Several converging factors have motivated the health professions to better evaluate their continuing competence procedures [24], [25]. These factors include new legislation, improvements in testing and measurement, increasing complexity of professional practice, and public demands for accountability and treatment efficacy. Most health professions such as surgery [25], family practice [26], [27], paediatrics [28], emergency physicians [29], anaesthesiologists [30], dentists [31], psychiatrists [32], radiation technology [32] and pharmacy [33], [34] have undertaken initiatives to improve quality assurance and evidence-based practice through the types of evaluation methods described here.

Legislation in a number of countries (e.g., Australia, Canada, Germany, New Zealand, Norway, and United States) has focused on assuring a system for monitoring the continued competency among health professionals [35]. In Canada, The Regulated Health Professions (RHPA) was enacted in Ontario in 1991 to achieve some of these goals [36] and subsequently amended in 2008. In another development in Canada, Bill 25

[37] amended various aspects of health systems legislation in British Columbia including continuing competence program requirements and was passed into law in 2008. Given that psychologists are often considered health care professionals, the extension of these actions to the psychology profession is the next logical step.

There are generally four categories of inadequate performance areas that have been identified for health professionals (e.g., Federation of Medical Licencing Authorities of Canada, [38]), which apply to psychologists as well:

1. Deficient competence (inadequate knowledge, skills, or attitudes or inability to appropriately apply knowledge, skills or attitudes);
2. Impairment by any condition (drugs, alcohol, physical disease, psychiatric disease, or other stressors) that impairs performance;,
3. Inappropriate behaviour (any behaviour that is a breach of the code of ethics, or poor communication, or poor empathy, as evaluated by patients, co-workers or peers); and
4. Deficient management of care (any misuse, overuse, underuse, or inappropriate use) of the resources available to the professional.

Licencing authorities generally follow these actions/ principles in determining professional competence for practice for its constituents:

1. Protect the public by ensuring that professionals are competent when they enter practice and by ensuring that performance throughout their professional lives continues to address the needs of the public and to reflect the standards of the profession;
2. React to complaints as the basis for protecting the public, but also to play a pro-active role in monitoring the performance of all members;
3. Ensure professional accountability for the public;
4. Monitor the performance of all of its practitioners;
5. Intervene when problem performance is detected with a practitioner; and
6. Undertake a leadership role in the performance monitoring of all practitioners.

In light of the above major performance areas of health professionals and actions/principles of licencing and regulatory boards with respect to the performance of health professionals, it is argued here that licensing authorities should develop reliable, valid, and cost effective competency monitoring tools that can be used in every day practice of all health professionals including practicing psychologists. One step forward in achieving this goal is to plans and conduct research in order to investigate the reliability, validity, and feasibility of an MSF system for practicing psychologists within various contexts and settings.

II. PURPOSE OF THE STUDY

The purpose of this proposal is to develop and validate a multi-source feedback system for practicing psychologists internationally. Specifically, this project could:

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1. Develop a specifications table;
2. Construct assessment instruments;
3. Conduct a pilot study of 100 psychologists in participating countries to assess assessment feasibility and collect preliminary empirical evidence for MSF reliability, validity, and normative purposes; and
4. Conduct a follow-up investigation of the MSF reliability, validity, and usability to develop a feedback system involving performance profiles.

As a part of the follow-up investigation a sample of 50 psychologists in each participating country would be asked to distribute 8 co-worker rating scales, 8 colleague rating scales, and 8 client rating scales to compare their responses to the self-assessment rating scales of the respective psychologists. To solicit professional interested and buy in, psychology regulatory bodies and professional associations within participating countries would be asked to provide support and direction for knowledge translation. In this regard, it is expected to have representatives from these bodies and associations as part of an expert working advisory group with the aim of having them participate in the development, design, and implementation of the MSF protocol and instruments for psychologists within their respective countries.

III. METHODS AND DATA COLLECTION

The general method would utilize collaborative research/development approaches so as to involve practicing psychologists and other prominent stakeholders. This proposal is based on the underlying principles of systematic instrument development so as to enhance reliability, validity, and utility. We intend to employ both qualitative and quantitative approaches to instrument development as well as data collection and generation. We intend to triangulate information from several sources (e.g., standards of practice, working advisory group, focus groups, archival data, and competencies) thus maximizing validity potential. The instruments would be pilot tested employing a sample of psychologists so that reliability, validity and usability evidence and data can be gathered as described below.

A. Table of Specifications

A working advisory group (psychologists, researchers and graduate students) would be established within the participating countries to facilitate the development of the assessment instruments. The main function of the working group will be to develop and revise a table of specifications to determine which competencies and constructs will be tapped by instruments. Employing iterative meetings with the working advisory groups and based on psychology practice standards, the working advisory groups will revise and confirm the table of specifications, which specifies the precise nature of the content of what is to be measured. Subsequently, the working groups will oversee instrument development and other research methodology activities described here.

B. Instrument Development

Based on the empirical literature, the table of specifications

and a review of governing psychology boards, researchers will develop and define the subscales to be included in the instruments (e.g., clinical knowledge and skills, communication skills, psychosocial management, collegiality), with convergent and divergent validity considered during scale construction. The following MSF instruments would be developed: Peer, Client, Co-worker, and Self- assessment. A pilot draft of the instruments will be sent to a sample of field practitioners to review the instruments and provide input on the items and their content to address face validity. Once the final draft of the instruments has been approved at this stage, a pilot study will be conducted to assess the feasibility, reliability and validity of the instruments. Standard reliability (e.g., coefficient alpha) and validity (face, content, construct, concurrent, predictive, convergent, divergent, discriminant, criterion relate) analyses will be undertaken. In addition, both exploratory and confirmatory factor analyses, as well as item-response theory approaches to the data will be considered as well based on the pilot data collection described in the next section.

C. Pilot Study

In order to assess the psychometric properties (reliability, validity, usability and feasibility) of the instruments, they will be administered to a sample of 100 registered psychologists in each of the participating countries. Based on the registration criteria, appropriate strata will be defined and the sample drawn employing proportionate sampling procedure. The data collected from this administration will be used to compute psychometric properties and develop norms. The various strata may reflect different practices of psychologists depending on their employment context, as well as demographic data where applicable. Thus the emphasis needed on the subscales by different practice contexts can be determined.

D. Reliability

The reliability of data is always of great concern. Thus we will analyze and evaluate the reliability of the instruments and data collection procedures. The instruments and their subscales will be assessed for internal consistency reliability (e.g., Cronbach's alpha coefficient). The standard error of measurement (SEM) for each subscale as well as the total scale score will also be derived. Item analyses can be conducted on all items to determine their usefulness and psychometric efficiency. Distributional properties and standard errors of measurement can be determined for each item, as can their discriminations.

E. Validity

The approach to validity is complex and will require a careful analysis of not only face and content validity, but empirical validity as well. Content validity is the degree to which assessments adequately sample both the content and processes of the domain of measurement. Face validity which is secondary to content validity, deals with the acceptance of the appropriateness of the assessment from the perspective of the assessed person. Empirical validity will include criterion-related approaches as well as construct validity. Criterion-

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related analyses will focus on both convergent and divergent validity of assessments together with factorial validity (as estimated by factor analysis). Accordingly, all instruments will be factor analyzed (principal component extraction and varimax rotation).

F. Usability and Feasibility

A frequently under-emphasized or neglected concern in assessment models is the feasibility and utility of measurement procedures or instruments. While some assessments may provide adequate reliability and some evidence of validity, their utility or feasibility of use may be somewhat low. The use of performance assessments in objective structured clinical (medical) exams (OSCEs), for example, while widely used in licensing testing in many health professions, may be very limited in their applicability because of their high costs and resource utilization. In any case, the usability, ease of administration and feasibility of the procedures will be assessed.

IV. SIGNIFICANCE OF THE STUDY

There is emerging consensus among many of the leaders in the field of professional psychology that assessment of competence should become more acknowledged, internalized, and even institutionalized during the career path of the practicing professional psychologist. To recognize this developing need, assessment procedures should be developed and implemented that provide beneficial feedback to professionals relative to their learning throughout their careers [21]. Moreover, there has been support for the assessment of psychologists that includes multiple perspectives, for example, by way of MSF that integrates input from multiple sources (e.g., self, colleagues, clients [39]-[41]), that methods of assessing competency meet acceptable criteria for validity, reliability, and feasibility [21], and that core competencies be identified and benchmarks for performance be established [13]. Core competencies have been identified and agreed upon by way of key foundational domains (e.g. professionalism, reflective practice/self-assessment, scientific knowledge and methods, relationships, ethical and legal practice, individual and cultural diversity, interdisciplinary systems) and functional domains (e.g. assessment, diagnosis, and conceptualization, intervention, consultation, research, assessment, supervision, training management, administration; [41]-[44]. As a result, the field has matured to the point that a MSF approach to establishing, maintaining, and furthering core psychologist competencies can now be undertaken with the input of psychologists and stakeholders across the world. An MSF system can be developed to assess the core competencies (such as those noted above) of psychologists that are reliable, valid, and feasible. Moreover, such a system could not only identify strengths and weaknesses of psychologists of their core competencies but also provide useful information and guidance for their professional development [6].

V. CONCLUSION

A competency–based assessment system for psychologists can potentially provide feedback to psychologists about their performance and improve their practice as evidenced with other health professionals. The development and implementation of MSF instruments designed to assess practicing psychologist in practice would seem to be a timely and valuable undertaking to not only ensure competency, but to gain essential recognition among other professions and consumers alike. This will not only enhance the image of the psychology profession, but also help other agencies recognize the value-added efforts of psychologists in promoting mental health services across the world.

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