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CPA Task Force on Prescriptive Authority for Psychologists in Canada

**Report to the Canadian Psychological Association Board of Directors
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Table of Contents

I.	Task Force Mandate.....	3
II.	History of Prescriptive Authority in Psychology.....	3
	American experience with RxP	3
	Levels of RxP training and practice.....	5
	Level 1: Basic Psychopharmacology Education.....	5
	Level 2: Collaborative Practice.....	6
	Level 3: Prescriptive Privilege.....	7
	The arguments for and against RxP: Overview of published commentaries.....	8
	Canadian RxP commentary.....	9
III.	Psychology RxP: Issues and Implications	10
	RxP within the science of psychology	10
	Practice implications.....	11
	Access to services	13
	Safety issues.....	15
	Regulatory and legal implications	17
	Professional Ethics.....	18
	Professional Opinions	20
	Perceptions of Psychologists and Students	20
	Perceptions of Allied Professions and Policy Makers	22
	Future relevance of the psychology profession	24
IV.	Psychopharmacological training in the Canadian context	25
	The need for basic psychopharmacological training	26
	Collaborative psychopharmacological training: towards active roles	27
	An evolutionary approach to prescriptive privilege	29
V.	Strategic Options.....	30
VI.	Executive Summary	32
	Summary Statement.....	33
	Conclusions.....	33
	Recommendations.....	34
	References.....	36

I. Task Force Mandate

A Task Force on Prescription Authority for psychologist practitioners was initially constituted by the CPA board of Directors in June 2007. Terms of reference and membership were finalized in September 2008. The Task Force was chaired by the Professional Affairs Chair of the CPA Board of Directors. Other members were designated or elected by four national psychology organizations and five CPA Sections. It was the intent of CPA to seek input towards consensus from these constituent organizations.

The CPA Board of Directors commissioned the Task Force to consider the relevant professional literature and diversity of opinion on prescription privilege for psychologists in Canada towards advising the CPA Board of Directors on the following issues:

- wisdom of moving the profession in this direction: assessment of reasons for and against
- priority of prescription privilege as an advocacy issue
- implications for training in graduate programs
- adequacy of APA post-doctoral training model
- certification and regulatory issues
- other relevant issues as raised by Task Force members.

II. History of Prescriptive Authority in Psychology

American experience with RxP

In the United States, the American Psychological Association and state associations of psychologists have been advocating for prescriptive authority for psychologists (abbreviated as RxP). As stated on the APA website, the American Psychological Association's official position (adopted in 1995), is:

APA supports the efforts of state and provincial psychological associations and individual psychologists as they pursue the right of appropriately trained psychologists to prescribe psychoactive medications. Prescriptive authority for psychologists is a legislative, regulatory, and educational issue impacting the scope of practice of licensed psychologists.

Two events with significant political profile propelled the RxP initiative to the forefront of APA advocacy. At the 1984 Hawaii Psychology Association annual convention, with a program theme of "Transcending Traditional Boundaries" (Inouye, 1984), U.S. Senator Daniel K. Inouye challenged psychology to seek prescriptive authority in order to provide better public access to mental health services. The potential credibility of RxP was heightened by the congressionally

mandated Psychopharmacology Demonstration Project within the Department of Defence. Economic difficulties with managed care organizations, such as that all patients see a psychiatrist and be prescribed medication, fuelled American practitioner interest in these developments (Elaine S. LeVine, New Mexico State University, communication to the CPA Task Force, September, 2009).

The Psychopharmacology Demonstration Project ran from 1991 to 1997, successfully training ten military psychologists to prescribe, with five ultimately receiving independent provider status. The training was expensive, with 1418 hours of didactic training in gross anatomy, neuroanatomy, histology, biochemistry, clinical medicine, pharmacology, etc., followed by a clinical practicum based on a second year psychiatry residency model (9 months). This demonstration, while limited, provided substantial credibility for state association legislative efforts (Robiner, Bearman, Berman, Grove, Colon, Armstrong & Mareck, 2002). Those sceptical of the results of this project argued that the “essential ingredient” in the success of the project, the characteristics of team practice in military medicine, could not be duplicated in the “civilian world” (Storrie & Velikonja, 2009).

There are currently two states where psychologists have been granted prescriptive authority: New Mexico (2002) and Louisiana (2004). In New Mexico, a collaborative relationship with a physician is required. In Louisiana, prescribing psychologists are designated as “medical psychologists,” with regulatory control recently placed under the Louisiana State Board of Medical Examiners. Numerous subsequent legislative attempts by state associations have failed. Recent attempts in Hawaii and Oregon received favourable consideration by legislatures but fell to governor vetoes.

As noted in a “status report” published in the American Psychologist by several APA RxP advocates (Fox, DeLeon, Newman, Sammons, Dunivin & Baker, 2009), legislative progress and professional interest for prescriptive authority has been slow compared to other professions (e.g. nurse practitioners). The two successful legislative efforts are a result of 88 RxP bills being introduced in 21 jurisdictions, so the rate of legislative failure is relatively high. While in the neighbourhood of 1600 psychologists have received RxP training (Ax, Fagan, & Resnick, 2009), the number of active RxP practitioners is less than 100. Fox et al (2009) consider this slow progress to be a result of several factors within the psychology profession:

1. “Our profession...has clear divisions between its practice and academic branches, leading to an absence of unity in advocacy issues.” (p.257)
2. “Even among practitioners, the notion of prescriptive authority is not universally embraced, and indeed only a minority of practitioners has evinced interest in seeking the ability to prescribe.” (p. 257)
3. Psychologists have “concerns regarding the overuse of psychotropics, the substitution of psychotropics for verbal or behavioral therapies, and general concerns about the efficacy of psychotropics.” (p. 257)

4. “Among all the disciplines whose members...prescribe, psychology has the core curriculum with probably the least overlap with traditional medical curricula...those opposed to its acquisition have successfully used those differences to hinder legislative approval for psychologists prescribing.” (p. 258)

As implied in these comments, there is continuing controversy within the psychology profession regarding the appropriateness of seeking prescription privilege. There is also inter-professional controversy in the United States with increased tensions between psychology and medicine, particularly psychiatry. It can be concluded from this history that the following issues must be considered as one evaluates the advisability of RxP advocacy in the Canadian context: (a) internal consensus building; (b) internal and external professional credibility for a psychologist role in prescriptive decision making; and (c) the cost-benefit of a psychologist role in psychotropic versus psychotherapeutic methods (i.e., training investment relative to effectiveness).

Levels of RxP training and practice

APA's Ad Hoc Task Force on Psychopharmacology (Smyer, Balster, Egli, Johnson, Kilbey, Leith, & Puente, 1993, p. 398) initially conceptualized three levels of psychologist training in psychopharmacology:

- Level 1: Basic Psychopharmacological Education
- Level 2: Collaborative Practice (consultation – liaison model)
- Level 3: Prescriptive Privilege.

In recent APA communications and documents, such as the *Recommended Postdoctoral Education and Training Program in Pharmacology for Prescriptive Authority* (APA 2009), there is little mention of Levels 1 and 2 and the primary focus is on Level 3 training. Nevertheless, the CPA Task Force has considered each of these three levels in its deliberations and found the implicit continuum useful as it attempted to address a number of issues from multiple perspectives.

Level 1: Basic Psychopharmacology Education

The concept of “basic psychopharmacological knowledge” refers to the “minimal training consistent with the needs of many practicing psychologists under current conditions” (Smyer et al., 1993 p. 398). Current conditions include the fact that many psychopharmacological interventions have demonstrated efficacy for many conditions, and that psychologists as major mental health providers need to understand the ways in which medications interact with psychosocial interventions. It was noted that neither accreditation nor continuing education requirements assured that psychologists were obtaining and maintaining a basic level of knowledge. Level 1 was conceptualized as being met by an extensive

survey course and continuing education requirements, covering issues of such as the biological basis of neuropsychopharmacology, classes of drugs, drug interactions and contraindications, medication compliance, and models of psychologist interaction with prescribing professionals. Course content requirements were specified by an APA Board of Education Working Group in 1992.

Level 2: Collaborative Practice

The concept of a “collaborative practice model” was seen as an extension of basic knowledge requirements so that psychologists could provide a more active “consultation-liaison” in “working with licensed prescribers to manage medications prescribed for mental disorders and integrating these medications into psychosocial treatment” (p. 398). It was noted that some psychologists already fulfill this role in specialized areas of practice, but that it would advantageous to provide specific programs towards this training. Level 2 would require more advanced didactic training and continuing education in psychodiagnostics and medication, pathophysiology, medication therapeutics, emergency treatment, developmental psychopharmacology, interpretation of laboratory and other physical tests, and supervised “hands-on” practice in decision making.

The collaborative model was elaborated by a further APA Board of Education Working Group in 1997 (APA, 1997) as an advanced psychopharmacology curriculum for specific disorders in specific populations. The Working group suggested various extended examples of what Level 2 training models might look like, rather than specify a core required curriculum. Example modules were delineated for:

- i. Older adults
- ii. Child / adolescents
- iii. Adults with serious mental illness: schizophrenia as an example
- iv. Mental retardation and developmental disabilities.

Lack of curriculum specificity was explained, in part, as taking into account the variety of pre-existing experiences that practitioners would bring with them. The collaborative model focused implicitly on the continuing education needs of practitioners and did not constitute a set of curriculum recommendations for graduate doctoral programs. Unfortunately, this lack of specificity may have also limited interest in Level 2 implementation, as this concept has been virtually ignored by graduate training programs.

APA documents did not perceive Level 2 as constituting a distinct extended class or practice specialty. Thus, among practitioners, there was likely a lack of interest in Level 2 from the outset. Level 2 did not afford the independence and continuity of care that many RxP proponents were seeking (Elaine S. LeVine, New Mexico State University, communication to the CPA Task Force, September 2009). Pagliaro (1995) critiqued the collaborative practice model’s “attendant problems

of accountability, transference, etc.” (p 306). Nevertheless, Robiner et al. (2002) considered the absence of active interest by APA in the Level 2 concept and the lack of training options towards collaborative practice preparation as “puzzling,” citing a significant graduate student and practitioner interest in the collaborative practice approach.

Level 3: Prescriptive Privilege

Level 3 was conceptualized as an extended class of competence in regulated psychological practice. Smyer et al., (1993) perceived that “Level 3 training for psychologists would be similar to training in other professions that have independent prescription privileges limited only by scope of practice and training (dentists, optometrists, podiatrists, and nurse practitioners).” It was noted that RxP training would require a substantial time commitment. As with other nonphysician prescribing professions, such as dentists, “in some settings, optimal patient care may require psychologists to have limited prescription privileges” (p.399). Level 3 was restricted to psychologists with: “(1) A doctoral degree in psychology (i.e., Ph.D., Psy.D., Ed.D.); (2) Current state license as a psychologist; and (3) Practice as a "health services provider" psychologist as defined by state law where applicable, or as defined by APA” (APA, 1996, p.2).

APA's *Recommended Postdoctoral Training in Psychopharmacology for Prescription Privileges* (APA, 1996) initially specified 300 contact hours of didactic instruction in five core content areas: (1) neurosciences; (2) pharmacology and psychopharmacology; (3) physiology and pathophysiology; (4) physical and laboratory assessment; and (5) clinical pharmacotherapeutics; and a minimum of 100 supervised practicum inpatients and outpatients seen for medication. The recent update of these requirements (APA, 2009) specifies “400 contact hours, at a minimum, of didactic instruction” in various content areas, but has avoided specifics in practicum experiences, relying instead on a “capstone competency evaluation.”

As APA's (2009) recent Level 3 requirements notes, “the program described in this document is a postdoctoral experience, which is intended to be an extension of doctoral education and training in psychological practice” (p. 1). In reality, there have been few developments in pre-doctoral RxP training, as graduate programs in clinical psychology have not significantly changed their curricula to provide enhanced psychopharmacological preparation. Thus, currently, Level 3 prescriptive authority training is predominantly post-doctoral and targeted to practicing psychologists. Fox et al. (2009) provide a summary of the development of Level 3 training programs:

Over time, eight to nine distinct RxP training programs, each of which claimed to meet the current APA proffered didactic criteria, emerged. The majority of these programs are university- or professional-school-based programs, and all target the expressed interest of full-time licensed practitioners. Distance learning, Web-based instruction, and Executive

Track modules (e.g., weekend-long sessions) are frequently employed. Several of the programs award a master of science degree in clinical psychopharmacology upon graduation; others grant certificates of accomplishment. All of the programs are postdoctoral in nature. (p. 264)

A typical example is the California School of Professional Psychology (in collaboration with Alliant International University), which developed a Master's Degree program in Clinical Psychopharmacology. This program involves 450 hours of didactic instruction followed by a clinical practicum training (most programs require experience with 100 patients under the supervision of a physician). The California program, as do many others, facilitates distance education options, with a requirement of eight weekends per year on campus. RxP tuition is typically over \$10,000 (Storrie & Velikonja, 2009).

The arguments for and against RxP: Overview of published commentaries

An extensive literature exists on RxP. Aside from opinion surveys, these articles are largely devoid of research or empirical evidence, and are largely arguments for or against Level 3 RxP. The following section briefly summarizes the main arguments, based on various review articles (e.g., Bigelow, 2009; Gutierrez & Silk, 1998; Heiby & Bush, 2002; Heiby, DeLeon, & Anderson, 2004; Lavoie & Fleet, 2002; Lavoie & Barone, 2006; Nussbaum, 2009; Sammons, 1998; Westra, Eastwood, Bouffard, & Gerritsen, 2006).

Published arguments in favour of RxP emphasize advantages both to the public and to psychology practitioners:

- Provision of medications (by prescribing psychologists) using a psychological-behavioural rather than a medical-disease model.
- Improved continuity of care in which psychologists would provide, manage, and integrate psychological and psychopharmacological interventions.
- Improved access by underserved populations to expertly assessed pharmacotherapy, especially in non-urban areas. The access issue is often combined with the assertion that psychologists would provide both more accurate assessments and more conservative and appropriate prescriptions, in combination with psychotherapy, than is otherwise available in many primary care settings.
- Enhanced economic and competitive viability of psychology practitioners.

Psychologists who oppose RxP emphasize the following adverse effects or perceived difficulties:

- Altered or distorted professional identity: the current mainstream scientific scope of psychology does not include pharmacological interventions.

- Limited educational preparation: professions with current or developing pharmacotherapy authority (including medicine, dentistry, ophthalmology, nursing, and pharmacy) devote significant proportions of their training to biological and medically relevant topics. Currently psychology undergraduate and graduate training models for professional preparation do not provide this biochemical and medical emphasis. This lack of emphasis is seen as problematic in the following ways:
 - RxP for psychology lacks external credibility,
 - RxP for psychology raises public safety concerns,
 - Introducing enhanced RxP content in psychologists' professional preparation would diminish current training emphases and graduates would receive less grounding in psychotherapeutic interventions and research.
- Conflicted interprofessional relationships with medicine resulting from RxP lobbying efforts would be counterproductive in advancing psychological practice.

Canadian RxP commentary

Until recently, most Canadian psychological associations have been silent on the RxP debate. Individual Canadian interest in the RxP debate, albeit from a distance, has been evidenced by numerous articles on the issue (from both proponents and opponents) published in CPA journals, especially during the early years of the APA initiative. These include opinion articles by Dobson (1995), Dobson and Dozois (2001), Dozois and Dobson (1995a, 1995b), Hayes, Walster, and Follette (1995), McCrea, Enman, and Pettifor (1997), Nussbaum (2001), Pagliaro (1995), St-Pierre and Melnyk (2004), Walters (2001), and Westra et al. (2006). Recently, some interest has occurred within provincial associations, as indicated by an Ontario Psychological Association newsletter devoted to this issue in 2009, publishing member opinion on both sides of the debate.

Until now, the Canadian Psychological Association has not formally studied nor developed a formal position statement on prescription privileges for psychologists. In the absence of material from the Canadian Psychological Association, provincial jurisdictions would have to rely on material from the American Psychological Association to guide clinical practice, provincial regulation, and education/training. Advocacy and training models developed in the United States for psychologist prescriptive authority may not be completely transferable to a Canadian political, professional, and educational context.

III. Psychology RxP: Issues and Implications

The CPA Task Force examined each of the major arguments and contentious points put forward by proponents and opponents of RxP, evaluating these within a Canadian context. It also examined various implications for the future of psychology in Canada.

RxP within the science of psychology

Some noted psychologists, such as Steven Hayes (Hayes et al., 1995), have argued forcefully that pharmacology lies outside of the scientific domain of psychology:

We take psychology to be the study of individual whole organisms interacting in and with an environmental and behavioural context, both historically and situationally. The structure of the organism is part of that interaction, as is the structure of the social or physical environment. But psychologists are interested in these participants only as they help elucidate the nature of an organisms' interaction with the world. Psychologists may study how the brain participates in a psychological interaction or how cultural culture does so, but psychologists are not therefore biologists nor are they anthropologists. The level of analysis of psychology is distinct from these other fields (Hayes et al., 1995, p. 313-314).

The logic of this argument defines psychology as a strictly behavioural-environmental discipline. Members of the Task Force would consider this to be a limited definition of psychological science, and are generally of the opinion that the history and future of psychology has always lain within a biopsychosocial framework. McCrea et al. (1997) similarly noted that excluding biological domains from psychology's definition and scope represents a limited historical perspective, based on typical practitioner training models, rather than an accurate depiction of the scientific discipline as a whole:

Canadian psychologists have a long and distinguished history in conducting basic research on the neurophysiological correlates of behaviour. (p.50)

Physiological psychology, neuropsychology, and psychopharmacology are as integral to psychology as is social psychology, developmental psychology, learning and conditioning, and cognitive psychology. While it is the case that psychological professional practice and training has tended to emphasize the psychosocial elements over the last 40 years, this cannot be used as an argument that the discipline no longer legitimately encompasses the physiological domain.

To delete biological factors from psychology's scientific base would not only be historically incorrect, but limit the profession's credibility. Task Force members

are in substantial agreement that a complete biopsychosocial model should guide psychologists' educational and professional preparation. Professional psychologists are required to understand client difficulties and provide effective consultation from a multifactor model that integrates medical, biological, and pharmaceutical factors with psychological, social, and cultural factors.

Practice implications

Related to the foregoing discussion of scientific domain and identity, it has been argued that RxP would dramatically alter the core practice of psychologists. For many disorders routinely treated by psychologists, the two empirically supported and commonly utilized treatment modalities are psychotherapy and pharmacotherapy. In practice, psychotherapy and medication are often deployed in combination, though the research literature is equivocal on the advantages of combined approaches (Barlow, Durand, & Stewart, 2009). Thus, RxP proponents argue that adding prescriptive authority to psychotherapy is simply the next logical step in psychology's evolution towards offering a complete integrated service (DeLeon & Wiggins, 1996).

RxP opponents express concern that psychologists will become less focused and proficient on stand alone psychosocial solutions as they become more medicalized (Bush, 2002). Kingsbury (1992) argues that while a mastery of pharmacological and medical skills is within the scope of psychologists, obtaining and maintaining this medical mastery would leave very little time for obtaining and maintaining a mastery of the psychological literature. Both proponents and opponents of RxP have noted that the bio-pharmacological emphasis within psychiatry has caused that profession to become a "pharmaceutical management specialty" (Read, Larson & Robinson, 2009, p. 122). Arguably, psychiatry has retreated from psychotherapeutic approaches and "ceded the leadership role in psychotherapy to psychology" (Kingsbury, 1992, p. 3). Kingsbury argues that it is difficult not to consider the long term implications for psychology of taking a similar pathway to that of psychiatry.

As is the case for many RxP issues, there is a paucity of data. Elaine LeVine (2007), one of the two original psychologists licensed to prescribe in New Mexico in February of 2005, has provided a detailed analysis of her first 18 months of private prescribing practice. She notes that after 18 months that she was prescribing to about 40-50% of her cases, slightly higher than the 30% cited for the DoD trained prescribing psychologists. LeVine cites various practice issues that emerge from a combined psychotherapy-pharmacotherapy role, including dealing with more health issues and medication compliance issues. LeVine describes this altered role as follows:

Combining psychotherapy with medication management requires the prescribing psychologist to develop a new system of when and how to talk about medication effects and side effects as well as when to focus upon psychotherapeutic issues. To maintain identity as a psychologist when prescribing, this system necessitates that the psychologist treat the patient

as an equal partner in the entire process of psychotherapy and medication management. (p. 70)

RxP proponents also answer the medicalization concern by pointing to the increasing specialization within psychology such as neuropsychology and health psychology. Prescriptive practice is argued to be simply yet another potential subspecialty:

As is the case with any specialization in a field of study, psychologists seeking post-doctoral training in psychopharmacology are for the most part a subset of practitioners whose pre-doctoral specializations point clearly to a biopsychosocial orientation. (Read et al., 2009, p. 123)

RxP opponents tend to argue for a unified field of psychological science and practice, whereas RxP proponents perceive training and practice diversity as a good trend, or at least nonproblematic. This difference is echoed in a consideration of professional opinion surveys (in a subsequent section), for which RxP proponents argue that even a minority of psychologists interested in the specialty of psychopharmacological practice should be permitted to pursue this path.

Levine and Schmelkin (2006), based on a survey of 241 APA member independent practitioners, argue that the impact of RxP on practice may be less dramatic than feared. It was noted that while those favouring prescriptive authority tend to more biological in orientation, a preponderance of all psychologists tend to endorse a biopsychosocial model. The importance of psychotherapy was similarly endorsed by a preponderance of psychologists:

...all respondents, regardless of their interest in prescribing, showed a strong tendency to endorse a factor emphasizing the importance of psychosocial interventions (e.g., "Psychosocial interventions are the most effective techniques for alleviating interpersonal, cognitive, and emotional distress"; "Psychotherapy produces more lasting changes than psychotropic medication") ... Respondents' tendency to advocate the importance of psychotherapy was independent of their interest in prescribing, suggesting that they are not eager to abandon psychological interventions in their pursuit of prescriptive authority. (p 208)

This article concludes that the interest in prescriptive authority represents more of an interest in a perceived useful tool rather than a dramatic departure in professional philosophy. At the same time, these authors acknowledge that these represent the thoughts of psychologists who currently don't prescribe or practice where that is the norm:

As such, the same survey, administered 20 years from now, might yield very different results. In other words, although the medicalization of psychology may not be the primary driving force behind the prescription-privileges movement, it may well indeed be a consequence later. (p 208)

Access to services

Access is a central issue to the RxP debate. Access by underserved populations to pharmaceutical mental health care, such as in rural regions, has been a key pivotal argument used in RxP advocacy by state associations (Elaine S. LeVine, New Mexico State University, communication to the CPA Task Force). Ax, Bigelow, Harowski, Meredith, Nussbaum, and Taylor (2008) describe this assertion by RxP proponents as follows:

Proponents of prescriptive authority for psychologists (RxP) have consistently argued that the success of this initiative will have broad societal benefits, particularly in terms of improved patient care ...This assertion has been further articulated in terms of improving mental health services to groups of patients characteristically underserved, in relative terms, by current health care delivery systems and patterns of practice. (p.184)

Underserved patient groups could include military, prison, aboriginal, and rural populations.

Access to psychologists is a primary advocacy issue of CPA, the CPA Practice Directorate, and provincial associations. However, it should be noted that access to psychology services and access to mental health services, particularly access to pharmaceutical mental health care, are not identical advocacy issues. It can also be argued by RxP opponents that there is a much greater access difficulty in both urban and rural areas in obtaining efficacious psychotherapeutic interventions than in accessing pharmacotherapy (Westra et al., 2006).

Access arguments in favour of RxP are important to address the overriding question as to the potential social good: *Would RxP be good for Canadians?* This is underscored by McCrea et al. (1997):

In applying ethical principles to the various arguments offered in the prescription privileges debate, the crucial question is what is in the best interest of the public rather than in the self interest of the respective disciplines. (p.50)

Access to service arguments have been politically necessitated, in part, by the need to convince legislators that there is a public issue to be served by RxP, and not just a professional advancement in scope of practice. As noted by Ax et al. (2008, p. 184), "RxP advocates must demonstrate its value in a cost-conscious environment." The emphasis on rural access issue in part accounts for the success of RxP initiatives in small states such as New Mexico. However, even in urban areas patients may experience access difficulties to psychiatry (but also often to psychology).

Canadian data (Nabalamba & Millar, 2007) indicate that rural access to family physicians in Canada, the main providers of pharmacotherapy, is comparable to urban centres. The 2005 Canadian Community Health Survey (CCHS) indicated that rural residents consulted family physicians with the same frequency as urban

residents, with a greater likelihood of multiple consultations (implying frequent follow-up). This was not the case for access to medical specialists:

The use of specialist services, however, was lower among people in rural areas. Whether they were aged 18 to 64 or seniors, rural residents had significantly low odds of a specialist consultation, compared with people in urban areas (Nabalamba & Millar, 2007, p. 32).

Consequently, the RxP access issue often focuses on access to specialists such as psychiatrists rather than access to general medical services. American RxP advocates often argue that psychiatrists are in short supply and thus the public is prescribed psychoactive medications primarily by family physicians, who may lack intensive training in psychological and mental health assessment (Bigelow, 2009). The American RxP access issue thus centers to some extent on the delicate issue of whether or not there is a comparative public value created by RxP psychologists relative to existing licensed nonspecialist practitioners that may include family physicians and, in the future, physician assistants and nurse practitioners. This access to specialist argument has been described Westra et al. (2006), but not advocated by these authors, as follows:

Many people lack access to psychiatrists and must look to under-trained general practitioners for psychotropic medications. RxP would go far to fill this gap. In addition, prescribing psychologists' clients would have a more complete array of treatment options available to them through a licensed practitioner without the complications of interprofessional collaboration. (p. 78)

The issue of "under-trained" (in reference to general practitioners) does not refer to the medical competence of other professions but to the adequacy of complete psychological assessments that would lead to better prescription practices, including in some instances withholding psychotropic interventions where psychosocial interventions are equally or more efficacious.

Many members of the Task Force were uncomfortable with arguments implicitly or explicitly critical of the competence of other professional groups, and these arguments are not endorsed by the majority of Task Force members. Indeed, as noted by McCrea et al (1997), such a statement may be at variance with the CPA Code of Ethics:

The proponents of prescription privileges for psychologists have concerns about the lack of training of other health professionals who prescribe. The CCE (Standard 1.1) says that psychologists demonstrate appropriate respect for the knowledge, insight, experience, and areas of expertise of others...The psychologist's action should entail consultation, collaboration, and fostering responsible action on the part of the practitioner...It is not clear how psychologists acquiring prescription privileges would correct the alleged harm done by others who prescribe. (p.50)

The difficulty of the rural access to specialist provider argument in a Canadian context is further complicated by a shortage of both psychologists and

psychiatrists. Neither specialty is in a position to offset the demand on family physicians to provide mental health pharmacotherapy or psychotherapy (communication from the CPA Northern & Rural Section Executive Committee). The shortage of psychologist providers is unlikely to be rectified in the near future given that Canadian universities currently graduate approximately only 130 doctoral practitioners yearly from accredited professional programs (noting that RxP also requires considerable additional post-doctoral training).

Finally, it should be noted that the funding of psychology services is not covered under the Canada Health Act (as administrated by the provincial departments of health) and this severely restricts access for many disadvantaged populations. It can be noted, however, that prescriptive authority might increase government interest in psychology (Nussbaum, 2009).

It can thus be logically argued that access to the combination of psychological assessment and psychoactive medication in the foreseeable future in Canada can more readily be realized by a collaborative practice model as embodied in the APA Level 2 training concept, without the need for extensive additional training required for psychologists to obtain independent prescriptive authority (Level 3). Contemporary models of interprofessional shared care in primary care settings point to the need and potential for psychologists to play a greater role in health care decision making.

Thus, a majority of Task Force members perceive a greater potential value and utility for collaborative models than has been the case historically in the APA approach. It is proposed that psychology approach the RxP access argument conceptually from a psychologist “value added” perspective which avoids critical and potentially inaccurate generalizations of other professions. Many allied professions, such as family physicians and psychiatrists, welcome the input of psychologists. While not necessarily precluding consideration of Level 3 training, a psychologist “value added” perspective includes reconsidering and emphasizing Level 1 and enhanced Level 2 preparation as potentially leading to more effective collaborative roles within interprofessional “shared care” models.

Safety issues

It is necessary to establish that psychologists can safely prescribe pharmaceuticals within their domain of practice (i.e., psychotropics, considering side effects, drug interactions, and the overall health of the client). Proponents and opponents of RxP agree that this is a primary issue (Resnick & Norcross, 2002; Robiner, Bearman, Berman, Grove, Colon, Armstrong, & Mareck, 2002). This is also an area where other professions have challenged psychology’s seeking RxP (White, 2003; Schlozman, 2010).

There is a deficit of published work and empirical evidence directly bearing on the safety issue. The main RxP demonstration project was within the U.S Department of Defense. Proponents of RxP point out those DoD psychologists were rated as providing excellent care. Opponents point out that this was a

limited and highly supervised training program that has been discontinued. As articulated by Lavoie and Barone (2006):

Though there is some evidence documenting psychologists' ability to prescribe safely, it is extremely difficult to draw any firm conclusions from so little data. (p. 61)

Due to the lack of empirical data and the limited number of small jurisdictions in which RxP occurs, it has been difficult for the Task Force to reach a consensus on the safety issue. This potential problem area should continue to be investigated, but remains hypothetical.

Issues of public safety are necessarily intertwined with adequacy of training and continuing education. At some theoretical point of additional training, continuing education, and regulatory requirements, there can logically be little doubt that psychologists can safely provide psychopharmacological interventions. Other non-physician professions (nurses, optometrists) safely provide pharmaceutical care, but these professions receive considerably more biologically and medically based content in their basic training programs. At this time, psychologists receive minimal prerequisite undergraduate and graduate level training in these domains, with RxP training occurring predominantly post-doctorally and outside of the accredited curriculums of degree granting programs. Graduate programs are reluctant to alter curriculum content significantly, and there is a perceived danger of diminishing education in psychosocial treatments should the profession emphasize RxP training. Thus, the primary basis for RxP safety concerns is based on perceived deficits in basic psychology training, as argued by Robiner et al. (2003):

As some psychologists advocate for prescription privileges, the need for closer analysis of the differences between psychologists and psychiatrists grows. Our data reveal key gaps in psychologists' training and the significant limitations in their knowledge pertaining to prescribing relative to psychiatrists...The authors believe that psychologists' deficits in training and pertinent knowledge are major hurdles to competent prescribing. (p.211)

As RxP psychologists are seeking limited prescription privileges relevant to areas of psychological practice, psychologists' prescribing safety pertaining to wider range of medical conditions and drug interactions requires a degree of association and collaboration with medical practitioners. Elaine LeVine (2007), in the analysis of her independent prescribing practice in New Mexico, describes her relationship with family physicians as follows:

...primary care physicians have been cooperative, sharing results of laboratory tests and accepting this psychologist's recommendations for intervention (p 67)...The collaborative relationship with the primary care physician assures patient safety and that a breadth of knowledge is brought to bear from both the psychological and biological level. (p. 70)

LeVine is arguing that the “safety” relationship is bi-directional with the psychologist providing enhanced accurate assessments; nevertheless, the implication is also that the physician relationship enhances the safety of psychologists’ prescribing.

In the absence of empirical studies of RxP safety, the existing data most suggestive of psychologists’ relative prescribing safety is simply the lack of regulatory complaint and lawsuits. In health care quality assurance, a major safety indicator is critical incident reports documenting adverse outcomes. One such indicator in independent practice would be patient and professional complaints. As far as can be ascertained by the CPA Task Force, there have been no disciplinary actions to date taken against prescribing psychologists in either Louisiana or New Mexico. This was confirmed through to April 2010 and obtained via requests by the ACPRO Task Force representative to the New Mexico Psychologist Examiners Board, Louisiana State Board of Examiners of Psychologists, Louisiana State Board of Medical Examiners, and the Association of State and Provincial Psychology Boards (ASPPB). At some point the argument that *prescribing psychologists must be assumed to be unsafe due to being a non-medical discipline* can not be indefinitely retained in the absence of incident reports and complaints. The current lack of disciplinary actions supports to some extent the contention that small number of existing prescribing psychologists to date appear to be relatively conservative and careful in their practice.

Regulatory and legal implications

Safety issues are integral to regulatory processes and potentially increased insurance costs. Prescribing psychologists might open up various certification and public protection issues for Canadian regulatory bodies that they do not currently face (Gutierrez & Silk, 1998).

Regulatory bodies will need to review applications, establish training criteria, and adopt credentialing criteria (Johnson, 2009; Storrie & Velikonja, 2009). In the current absence of an accreditation process for RxP training programs, the burden on regulatory bodies to determine credentialing criteria is arguably increased.

Regulatory and professional liability insurance cost issues have been identified as a concern (Johnson, 2009). Westra et al. (2006) point out that one concern is that “should even a few malpractice suits against prescribing psychologists based on claims of inadequate medical training be successful, insurance coverage would become prohibitively expensive or disappear altogether.” Canadian survey data (St-Pierre & Melnyk, 2004) notes that RxP opponents express concerns of increased regulatory fees as well as increased liability and insurance expenses associated with prescription privileges.

Regulatory and insurance costs are directly linked to complaints and litigation. In the Presidents Column of the Clinical Psychologist, Summer 2002, Newsletter of APA Division 12, Larry Beutler predicted several lawsuits to be forthcoming

following the New Mexico RxP legislation concerning “the limits of competence” and “practicing medicine without a license.” However, these predictions have not born out to date. Thus, as with safety concerns, the issue of regulatory costs associated with RxP remains hypothetical at this time.

As RxP represents an extended class of psychological practice, designation is also an issue. Storrie and Velikonja (2009), in consideration of the Ontario regulatory processes, illustrate some of the issues in designating RxP privilege:

The addition of prescription privileges to the competencies of licensed Psychologists in Ontario would require the following considerations: The development of an extended class designation to each of the areas of specialized practice currently recognized by the College of Psychologists of Ontario (i.e., Clinical Psychology, Clinical Neuropsychology, etc). Although many US jurisdictions have contemplated an additional title for Psychologists who have prescription privileges using some form of association to the medical profession (e.g., Medical Psychologist), this would potentially create a category of mini medical professionals in psychology. Psychologists can remain consistent in the use of the current title of Psychologist, but have the extension of this competency recognized as a designation in their title (i.e., C. Psych. with addition of an acronym indicating addition of prescription privileges such as RxP). (p. 18)

Recent developments in Louisiana, one of the two states with psychologist prescriptive authority, illustrate concerns regarding the designation of “medical psychologist.” As of January 1, 2010, “Certificates of Prescriptive Authority (Medical Psychologists)” were transferred by Act 251 of the Louisiana Legislature from the Louisiana State Board of Examiners of Psychologists (LSBEP) to the Louisiana State Board of Medical Examiners (LSBME). Thus, regulation of issues of psychology practice appears to fall under the LSBEP whereas medical psychology (RxP) would fall under LSBME (LSBEP Newsletter, 2010, Vol. 23, No. 1). This development would appear to point to the appropriate certification and regulation of psychologist prescriptive authority as still in some flux. While this development is recent, the CPA Task Force would strongly recommend that extensions to psychological practice remain within the regulatory scope of psychology’s own regulatory bodies.

Professional Ethics

Ethical issues of public good and safety are central issues to evaluating RxP and have been discussed previously. Additionally, some articles (e.g., Antonuccio, Danton, & McClanahan, 2003) have raised concerns based on the difficulties that the medical profession has had managing its relationship to the intensive marketing practices of the pharmaceutical industry. There is a documented significant biasing factor to medical practice introduced by a pharmaceutical corporate influence, including free lunches and samples (Reist, & VandeCreek, 2004). The concern has been expressed that RxP and the resulting interaction with the pharmaceutical industry will be harmful to the integrity of psychological

practice, whereas others (Levant & Sammons, 2003) argue that the sound scientist-practitioner training of psychologists will buffer this influence.

Antonuccio et al. (2003) advocated a quite strict firewall between psychology practice and the pharmaceutical industry:

One of the most important promises made by organized psychology in the pursuit of prescription privileges is that it will approach pharmacotherapy from the perspective of the scientist-practitioner...To back up this promise, we propose a high standard of scientific integrity and a clear boundary between science and advertising. (p. 1036)

This interaction of psychology and the pharmaceutical industry is largely speculative. The pharmaceutical industry has not paid significant attention to psychologists to date due to the small number of prescribing psychologists. To date, prescribing psychologists have been observed to be conservative in their prescriptive behaviours (Elaine S. LeVine, New Mexico State University, communication to Task Force, September 2009).

It may be argued that it is naïve to assume that psychologists have a scientific moral superiority producing immunity from pharmacological marketing influences. It is equally naïve to argue that one should avoid delivering a potentially effective treatment because it exposes one to these marketing influences. Medicine has taken many steps in recent years to come to terms with this corporate influence, and psychology would have to take similar steps.

Timko & Chowansky (2008) also note that RxP psychologists would have to contend with the “direct to consumer advertising” strategies of pharmaceutical corporations (opposed by medicine), which promotes drug usage through medicalizing mental disorders. These authors note that psychologists already contend with this problem as many “make recommendations to patients about the need for adjunct psychopharmacology, interact with psychiatrists or other prescribing agents, educate, and follow patients’ medication usage” (p. 516).

Thus, an altogether different ethical argument can be made towards developing a Level 1 and/or Level 2 professional training standard of practice for psychologists. Many or most patients seen in contemporary psychological practice will have already been prescribed medications or influenced by direct to consumer marketing, and psychologists should be knowledgeable about the emotional-behavioural impacts of these agents. Psychologists should be aware of the safety issues associated with commonly used pharmaceutical agents in their areas of practice. Additionally, in assessing patients, psychologists should be in a position to help patients make informed treatment decisions, considering all common efficacious alternatives. Psychologists should be knowledgeable about the advantages and disadvantages of combined treatments (i.e., psychotherapy and pharmacotherapy combinations).

Similar arguments were expressed by McCrea et al. (1997) employing the CPA Code of Ethics (CCE):

The CCE clearly outlines the need for psychologists to maintain competence in their specialty, whether or not they are currently practising in that area (p.55). The code recommends various ways of keeping current and suggests that psychologists keep informed of progress in their area(s) of service, take this progress into account in their work, and try to make their own contributions to this progress (CCE Standard iv.2). Given the apparent wide spread use of psychotropics, these CCE standards suggest a duty of psychologists in mental health practices to at least maintain a basic knowledge in psychopharmacology. (p. 49)...The CCE suggests psychologists have a responsibility to develop and maintain an awareness of the impact of psychotropics on client health, and a need to actively foster sound relations with allied professionals. (p.50)

Professional Opinions

Perceptions of Psychologists and Students. Various surveys of psychologists and psychology students have been published, and these are discussed in approximate chronological order.

Robiner et al. (2003) reported in their survey of 49 psychologists recruited at the annual meetings of the Minnesota and Pennsylvania Psychological Associations in 1991 that more were opposed (45%) to RxP than in favour (33%), and very few (14%) were interested in pursuing RxP for their own practice. Walters (2001) provided a meta-analysis of opinion surveys conducted between 1980 and 1999. Sixteen studies were included of practicing psychologists, psychologists in training, and directors of training. Overall, RxP favorable statements concerning RxP were supported by 52% of respondents. However, few expressed willingness to pursue training and opinion was divided on APA's efforts to spearhead RxP. Students were more interested in RxP than senior psychologists. Most university-based directors of clinical psychology training indicated that faculty were generally unwilling to change core curriculum to accommodate RxP and biopsychology. There was generally more support for RxP in post-1990 surveys.

Fagan, Ax, Resnick, Liss, Johnson, & Forbes (2004) surveyed all APPIC internship directors and interns during the 2000-2001 training year, replicating a similar 1995 study. A majority of interns and directors of training supported APA's advocacy for RxP, though this had marginally declined from 72% in 1995 to 69% and 62% in 2001 for the two groups, respectively. It was noteworthy that there was no difference between American and Canadian samples, though the latter was too small to draw firm conclusions.

St-Pierre & Melnyk (2004) employed a large sample of Canadian students and practitioners. This survey indicated that 60% of clinical graduate students (from 22 Canadian universities) and 62% of clinical practitioners indicated support for CPA advocacy in favour of prescription privileges for psychologists. A large majority of respondents did not perceive RxP to be theoretically or philosophically at variance with the field of psychology. More students perceived themselves as

pursuing prescription privilege if given the opportunity, whereas only a minority of practitioners were personally interested. Students ascribed an average 45% likelihood of psychology obtaining prescriptive authority, whereas practitioners gave it a 40% probability.

St-Pierre & Melnyk (2004) also asked for comments in their survey. Echoing the main RxP proponent arguments, those supporting RxP cited issues of improved client service (rural needs and the benefit of combined or holistic care), with benefit to the profession also noted. Those opposed expressed two themes, also similar to the debate in the literature: “one pertaining to a possible reliance on prescription privileges and the resultant loss of identity for psychology, and the other to the increased liability and insurance expenses associated with prescription privileges” (p. 290).

Similar results have been obtained with subsequent surveys of American psychologists (Baird, 2007; Grandin & Blackmore, 2006), with opinion still divided but many expressing interest in obtaining RxP training. It would appear that support for RxP has grown over the decades, but Fox et al. (2009), in their APA status report, note that this remains short of a clear consensus:

Even among practitioners, the notion of prescriptive authority is not universally embraced, and indeed only a minority of practitioners has evinced interest in seeking the ability to prescribe. (p.257)

Fox et al. (2009) speculate that the tide has possibly turned regarding the perceived efficacy of pharmaceuticals. In Walters’ (2001) meta-analysis of data from 1980 to 1999, pharmaceuticals were often seen as more effective than psychotherapy, despite published empirical evidence to the contrary. This was a period of SSRI ascendancy (and other new psychotropics) in professional thinking and the media and public consciousness. More recently opinion has shifted to a greater appreciation of psychotherapies such as CBT; psychotherapies have regained some prominence. Conversely, as discussed previously, Fox et al. (2009) speculate that the slowed progress of RxP advocacy has been fuelled by practitioners’ cautiousness regarding the overuse and relative efficacy of psychotropics. Overall, this is a positive development: most RxP proponents and opponents would agree that the issue of prescriptive authority is better debated in an atmosphere of confidence in psychology’s existing interventions, such that prescriptive authority is truly assessed for its added value and not as a replacement for psychology’s established skills.

How much support is sufficient to make RxP an advocacy priority? How much agreement is required? In a recent survey of Canadian psychologist private practitioners (CPA, 2008), only a small minority of respondents listed prescription privilege as a major concern. Grandin & Blackmore (2006) in their student survey noted that RxP supporters tend to see RxP as viable even if only a minority seeks this option. Conversely, those with less interest in RxP were less supportive of an individual choice approach. In Canada, Naussbaum (2001), Chair of the CPA Psychopharmacology Section, has argued for individual choice.

Pragmatically, as implied by Fox et al. (2009), a vocal opposition within the profession severely complicates the potential for legislative success.

Perceptions of Allied Professions and Policy Makers. As noted previously, several of psychology's allied professions have taken a critical stance towards RxP. This is usually argued on the basis of inadequate training and threats to safety. Illustrative of these arguments are comments attributed to an American Psychiatric Association spokesperson (Patrice Harris, MD) at a 2002 conference sponsored by the National Alliance of Mentally Ill (NAMI) Policy Research Institute (NPRI). It should be noted that this conference, in which the American Psychological Association also participated, was held immediately following the first successful adoption of RxP legislation in State of New Mexico:

APA's (psychiatry) opposition related primarily to the issue of safety and (Patrice Harris) said this was not, for them, a turf issue, because psychiatrists' income would not be affected by this law... Expanding scope would threaten patient safety. Patients would receive a lower level of care because training for prescribing is too narrow. Dr. Harris emphasized that the errors that would occur would not be due to malfeasance but rather to this lack of education and training. Specifically, she highlighted the approach to diagnosis outlined in the *Diagnostic and Statistical Manual of Mental Disorders* in which medical causes for presenting symptoms are ruled out first. It is unlikely, she claimed, that psychologists would be able to approach patients in this way and thus may miss many physical problems they are not trained to recognize and diagnose....Dr. Harris' comments regarding the breadth of education and training that both nurses and physicians have and that physiology is integrated and not "tacked onto" a basic program (White, 2003, p.69).

As noted by Fox et al. (2009), other professions point to psychology's core curriculum as being deficient in biological content, and this argument has been effective in lobbying against RxP legislation. Many RxP advocacy efforts have been defeated (e.g., in Hawaii and Oregon by governor vetoes) based on medicine's lobbying employing arguments centered on the issues of inadequate training and safety concerns. Similar arguments have emanated from nursing opposition:

Currently, prescriptive privilege is primarily reserved for nursing and medical professionals. Physicians, physician assistants, nurse practitioners, and clinical nurse specialists all may obtain prescriptive authority. The defining commonality among these professionals is, of course, the depth and degree of human biological and psychopharmacological knowledge they possess. These professionals did not simply take one or two classes to obtain this knowledge base. The entire education and training for these professions are defined by immersion and concentration on the way in which the human body works, the impact on the body when it does not work as anticipated, and the role of pharmacotherapies in the treatment of health problems. (Walker, 2002).

Proponents of RxP have pointed out, likely with considerable justification, that these arguments are indeed guild based (Fox et al., 2009). Patrick De Leon, former APA president, and other proponents of RxP predicted this response (DeLeon, Fox, & Graham, 1991):

As one might imagine, whenever one of the nonphysician disciplines has sought prescription privileges, the particular medical specialty group involved, and organized medicine in general, have argued vigorously that allowing such practice by nonphysicians would result in a public health hazard (i.e., that patients would inevitably be harmed). Interestingly, objective studies of the prescription patterns of nonphysician health care providers clearly suggest just the opposite. (p 384)

However, it would be quite mistaken to reduce the training-safety debate entirely to psychology versus medicine guild wars. Some physicians have supported RxP, indeed providing necessary legislative vocal support and practicum supervision. Conversely, voices within psychology itself have raised concerns about safety, some forcefully (Heiby & Bush 2002) and others more cautiously (Lavoie & Fleet, 2002; Lavoie & Barone, 2006;).

The mere existence of allied professions' opposition to increasing psychology's scope of practice should not be a deterrent. As Nausbaum (2009) points out, prior to World War II, attempts by psychology to establish itself as an applied profession and practice psychotherapy were opposed by medicine based on training and safety concerns. There are, however, concerns by many psychologists about the cost-benefit ratio of entering into RxP professional battles with medicine, and specifically with psychiatry (Bush, 2002) and family medicine. The Canadian opinion survey by St-Pierre & Melnyk (2004) found that "many believed that a movement for prescription privileges by psychologists would only widen the already present rift between the medical and psychological professions" (p. 290). Partially addressing this concern, a study of American pediatrician reaction (Rae, Jensen-Doss, Bowden, Mendoza, & Banda, 2008) found that 29% of pediatricians felt RxP would damage professional relationships, whereas 62% indicated their continuing collaboration.

Most psychologists surveyed by St-Pierre & Melnyk (2004) also anticipated a strong medical and psychiatric association lobby as being an obstacle to obtaining RxP in Canada. The Canadian political context does not foster successful legislative private members' bills based on consumer-professional coalitions, which are the vehicle used with limited success by APA and state associations. In order to be successful in a Canadian political context, it is necessary to have a wide base of internal and external credibility, including with the public and consumers, in order to win support from government policy makers.

RxP credibility is crucial for successful lobbying of governments. Scopes of practice in Canada are broadening, and are increasingly competency-based. With wide based support, opposition perceived by politicians as simply guild issues often will be less of a critical factor. On the other hand, opposition both

from other professions and from within psychology that undermines the credibility of proposed practice enhancements, such as has occurred in the APA RxP experience (Fox et al., 2009), will likely defeat such attempts in the Canadian political process.

Future relevance of the psychology profession

A driving force for RxP within APA was the perceived potential for economic and professional marginalization of psychology. Prescriptive authority was seen as essential to psychology's survival (Johnson, 2010). There were several interrelated reasons.

Firstly, in the 1990s when APA ratified RxP advocacy, psychotherapy appeared to be being eclipsed in importance by pharmacotherapy. Great importance was placed at that time on the introduction of SSRIs for depression, a bread and butter disorder for much of psychological psychotherapeutic practice. However, recent research has reversed this trend and led to some scepticism concerning the effectiveness of antidepressants (Greenberg, 2010). As a result, current empirically based best practice guidelines give a more balanced emphasis to pharmacotherapy and psychotherapy for anxiety and depression (particularly the cognitive-behaviour therapies, most of which were developed by psychology). As noted by Fox et al. (2009), this may have diminished some psychologists' interest in pharmaceutical practice.

Secondly, unlike Canada, many more nonpsychologists in the USA have regulated scopes of practice to offer counselling and psychotherapy. As a result, the competition was and is significant. In Canada, the situation is quite different in that psychology is the largest regulated mental health specialty provider and there are not a lot of other regulated psychotherapy providers in the field. This could and likely will change in the future.

Thirdly, Health Management Organizations in the USA have tended to deploy psychiatrists for medication and other less costly professions than psychology for so-called "talk therapies", which was given a secondary role. HMO practice restrictions were central to psychologists' perception of economic threat, as noted by Lichtenberg, Goodyear, & Genter (2008):

Managed care has become a pervasive force that arguably has been a primary impetus for *psychologists* pursuing *prescriptive authority* and searching for alternative practice roles. (p. 21)

Private practitioners in Canada have not experienced a threat to their livelihood parallel to that of American psychologists. As far as can be determined from a 2008 CPA survey of private practitioners (CPA, 2008) and a recent informal survey in 2009 of provincial associations by the CPA Practice Directorate, the vast majority of practitioners in all parts of the country continue to receive more referrals than they can handle. Clearly, there is a public demand to be seen by a psychologist, which is likely to continue over the near term.

Institutional psychology practice in Canada, such as in hospitals and regional health authorities, has been more troubled with the advent in the 1990s of economic restraints and program management structures. Psychology positions in publicly funded health care, education, and in criminal justice have been reduced in some jurisdictions, or under funded in others, resulting in vacancies. Program management in health care has had the impact of reducing the unique role of psychologists and replacing psychologists with other professions, reminiscent of HMOs in the USA. Ironically, the manualized forms of cognitive behaviour therapy, largely developed by psychologists, reinforces the perception from health care administrators that one does not require a psychologist's level of training to practice psychotherapy effectively.

Would obtaining prescriptive authority enhance psychology's economic survival? To the extent that psychologists could provide a complete service and extend their ability to treat a number of psychotic disorders such as bipolar disorder and schizophrenia (LeVine, 2007), this may potentially be the case. In Canada, Nussbaum (2009) has argued that without enhanced roles, psychologists are likely to remain in a "second-rate status" and "experience diminution of psychology positions in health care, research funding, scope and utility "(p. 6); conversely "expanding our repertoire will afford a greater likelihood of success" (p. 6).

IV. Psychopharmacological training in the Canadian context

In order to consider the potential role of psychopharmacology in Canadian professional psychology practice, it was necessary for Task Force members to examine training issues and to entertain recommendations that (if implemented) could alter graduate program curriculum and accreditation requirements. While there has been room for rich diversity in psychology training, there is a need to balance diversity with a defined core professional curriculum, as is the case in all professions. There is also a need to consider student concern about the number of required courses in graduate training and the resulting length of training.

As noted previously, the CPA Prescriptive Authority Task Force found the initial three level continuum of psychopharmacological training conceptualized by the APA Ad Hoc Task Force on Psychopharmacology (Smyer et al, 1993) useful in organizing its consideration of this complex issue. There was a general Task Force consensus that in order to meet current and future practice expectations, predoctoral training within graduate programs and internships need to provide basic psychopharmacological information (Level 1) and experience in active collaborative practice with prescribing professions (Level 2). Most graduate programs offer or require basic psychopharmacological courses (consistent with Level 1). It is a relatively small but important step to designate these courses as required for accreditation. Collaborative practice (Level 2) training represents a

future ideal that will require considerable development within graduate training programs and a careful consideration of legal scope of practice requirements. While emphasizing the advantages of basic and collaborative practice models, the Task Force took a more cautious and evolutionary approach to seeking and training for prescriptive authority (Level 3).

The need for basic psychopharmacological training

The CPA Prescriptive Authority Task Force considers psychology to be a biopsychosocial discipline that encompasses psychopharmacology. All practicing psychologists require a biopsychosocial foundation if psychology is to maintain its integrity as a profession. Basic psychopharmacological preparation is considered a minimum predoctoral requirement to treat patients, who are frequently receiving pharmacotherapy from other licensed practitioners. This applies to students in programs of clinical psychology, clinical health psychology, counselling psychology, school psychology, and clinical neuropsychology.

Basic psychopharmacological training should be specified more distinctly within accreditation requirements. Current accreditation standards are defined by general content areas (biological, social, cognitive, etc.), emphasizing breadth of training. The problem of this approach is illustrated by the issue of psychopharmacological knowledge. Psychopharmacological preparation is not currently a specific requirement. It is mentioned as an option under a required “biological” core area:

Biological bases of behaviour (e.g., physiological psychology, comparative psychology, neuropsychology, psychopharmacology) (CPA, 2002).

It is entirely possible within these standards for a doctoral student in a professional program to graduate without formal psychopharmacological training. While this is not normally the case, this potential is viewed as professionally unacceptable.

Specifying a pharmacological requirement should not be done to the exclusion of training in other biopsychology topics. As psychology increasingly participates in the care of patients with core health issues (e.g., cardiac, diabetes, chronic pain), there is a corresponding increased need for neuropsychological and physiological knowledge. This could be accomplished by delineating a need for a specific psychopharmacology requirement within the accreditation description (CPA, 2002) of the biological core requirement, such as by the following rewording of this requirement:

Biological basis of behavior, including basic knowledge of relevant psychopharmacology (such as could be obtained from a survey course or equivalent experience) and other relevant instruction in areas such as, for example, physiological psychology, comparative psychology, and neuropsychology.

As noted in current CPA accreditation requirements, these requirements could be partially obtained through undergraduate preparation.

A similar concern exists in the lack of regulatory specificity in continuing education requirements. Practitioners in most jurisdictions are not explicitly required to maintain psychopharmacological continuing education requirements for their area of practice.

Collaborative psychopharmacological training: towards active roles

The consultation-liaison model is seen by the majority of CPA Task Force members as the optimal standard for contemporary psychological practices. Psychologists need to be trained adequately in interprofessional practice, providing input into all aspects of inter-professional treatment decision making, including both psychotherapy and pharmacotherapy.

Collaborative practice training is important for psychologists to meet future practice expectations. Primary care and mental health services are increasingly using a “shared care” interprofessional collaborative model. Psychologists need to be adequately prepared for functioning in fully collaborative ways in primary care and other health care settings. The treatment literature makes frequent reference to combined pharmacotherapy and psychotherapy treatment approaches, and this is the norm of practice in many settings. Psychologists need to be prepared to provide credible consultation in the full range of psychotherapy and pharmaceutical treatment options to collaborating pharmaceutically licensed practitioners. Psychologists are also ethically required to provide clients with an informed consent discussion that includes a full understanding of the benefits and risks of all psychotherapy and pharmacotherapy options and combinations available to the client. To participate fully in combined treatment decision making, including when to recommend using psychotherapy alone, psychologists need more than a cursory knowledge about the benefits and risks of various psychoactive agents.

Unfortunately, the de-emphasis of psychopharmacological training in graduate programs does not provide students with the confidence to fulfill these expectations:

Sometimes there's a sense that students are trying to avoid this topic when talking to patients. And maybe that's because it's uncharted, vulnerable territory for them. (Bieling, 2009)

Historically, the low priority given to psychopharmacology training was likely due to both a professional hands-off attitude towards medication and an academic anti-pharmacology stance. Nevertheless most psychologist practitioners gradually acquire an ad hoc working knowledge of medication deployed in their area of practice. However, it is important to provide psychopharmacology training more systematically, providing graduating psychologists with the knowledge and confidence to contribute within a full biopsychosocial decision making model.

Collaborative practice level training (Level 2) was not defined by a precise curriculum by the APA Working Group (1997), nor have graduate school training

models been developed. To meet this goal primarily through additional course work may be beyond the ability of current graduate doctoral programs to meet without distorting current training requirements and extending already lengthy study requirements. Thus, there is a need for graduate programs to develop examples of curricula and experiences that effectively prepare psychologists for combined pharmacotherapy-psychotherapy assessment and consultation. To meet this goal, graduate programs will likely need to consider increasing undergraduate expectations. Extended undergraduate expectations are common in other health professions, and would provide significant training efficiencies in the psychology graduate years. For example, requiring prerequisite undergraduate courses in the biological sciences would help prepare students for graduate training in health psychology and clinical neuropsychology, as well as contribute to a basic understanding of psychopharmacology. Undergraduate courses in psychopharmacology are often available.

The most efficient way to train students in combined pharmacotherapy-psychotherapy assessment and consultation is to build pharmacological assessments into supervised clinical experiences. It should be noted that medical school training in medication decision making is gained primarily on a case by case basis. Student supervisors should model the attitude that psychologists are expected to assess the medications of their patients (prescribed by other service providers), tracking these interventions and the positive and negative effects on patient behaviour. To achieve this, as was noted in the discussion of basic knowledge, there is a need for regulatory bodies to increase psychopharmacological continuing education requirements for existing practitioners and supervisors.

A cautionary note is required regarding the consultation-liaison model and psychology's legal scope of practice. This is an issue that will require further study by regulatory bodies. It is not the intent of the CPA Task Force to recommend that psychologists exceed their legal scope of practice. Recommending a specific medication to a patient potentially exceeds most current provincial scopes of practice, even if ultimately prescribed by another professional. However, being knowledgeable and alert for common side effects of current medications is simply sound practice. Training experiences to prepare students to dialogue (verbally or in written consultations) with physicians (and other prescribing professionals) regarding the implications of psychological assessments for combinations of pharmacotherapy and psychotherapy is consistent with modern inter-professional practice. A recommendation to a patient that a medication consultation referral be made is also defensible within an inter-professional practice. Regardless of where one ultimately places the line for defensible psychologist scope of psychopharmacological decision making, psychologists' being prepared for a more knowledgeable consultation-liaison interprofessional practice regarding treatment options is highly desirable and likely seen as such by psychology's medical colleagues.

An evolutionary approach to prescriptive privilege

The CPA Task Force did not arrive at a specific recommendation regarding advocating for prescriptive privilege legislation (APA Level 3 RxP). The Task Force consciously chose to recommend an evolutionary approach. Psychology has not achieved the necessary internal and external credibility in biopsychology and psychopharmacology in order to take this step at this time. However, from the foregoing discussion, it should be clear that the Task Force did not rule out this possibility at a future time.

As discussed above, the Task Force is recommending that basic psychopharmacological knowledge be an accreditation requirement. The Task Force is also asking the profession to consider going beyond basic biopsychopharmacological education, and adopt a fuller biopsychosocial education model to facilitate more active inter-professional contributions to the full range of psychologically relevant treatment decisions. This needs to be accomplished with a combination of undergraduate, pre-doctoral, and continuing education expectations. These steps provide an evolution of psychological practice towards a more comprehensive biopsychosocial model, which may or may not lead towards prescriptive practice at some future time.

The Task Force did consider the appropriate placement of prescriptive privilege training, were the profession to take this step at a future time. A majority of Task Force members consider that continuing to deploy a post-doctoral model for Level 3 training remains the most practical educational approach for those seeking this supplementary training. APA initially conceived of Level 3 RxP as attracting a small number of psychologist practitioners, and this remains the case.

Some have argued that there is a need to shift from an exclusively post-doctoral RxP training model to one in which a pre-doctoral option is also made available (Ax, Fagan, & Resnick, 2009). They cite significant student interest in RxP as a training elective, and undoubtedly this option would make RxP training more economically feasible for those who might seek it. The problem with this approach is that it pits RxP directly against traditional training emphases in the already crowded and lengthy curriculum, as was expressed by Dobson and Dozois (2001):

As faculty members in clinical psychology programs...we cannot help but conclude that training in professional psychology would be significantly lengthened and skewed if the science and practice of prescribing was added to the curriculum (assuming nothing else was deleted!). (p. 133)

While it has been noted that the psychology training curriculum has been slow to change and update itself (Arnett, 2005), there is no reasonable way to make the shift to an RxP focused pre-doctoral curriculum and maintain common training standards. Nor would this change be sensible without a reasonable promise of regulatory changes to scope of practice in Canada in the near future. Curriculum evolution would appear to be a sensible approach that ethically meets today's

practice demands by including psychopharmacological knowledge, which may or may not lead to prescriptive privilege training at a future time.

RxP training programs in the USA have not yet developed specific accreditation standards. Currently there is some debate within APA about developing a “designation” versus an “accreditation” process as some existing programs offer only certificates, whereas others offer university degrees (Elaine S. LeVine, New Mexico State University, communication to Task Force, September, 2009). Nevertheless, development of an accreditation standard and process would seem to be an essential aspect of establishing the adequacy of RxP professional training.

V. Strategic Options

There is little doubt that psychology can choose to move towards RxP and that some members or associations will perceive this movement as desirable and chose to pursue it. The potential success of RxP legislative advocacy in a Canadian (and largely a provincial) context remains to be determined. The issue that collectively faces Canadian psychologist organizations such as CPA, CPAP (and each provincial association), ACPRO, and CRHSPP, is to what extent RxP is or is not an advocacy priority.

Prior to drafting the final report, the CPA Task Force (in order to foster feedback and broader discussion) published its core assumptions regarding RxP advocacy priorities (Sexton, 2010), which concluded:

Psychology is historically a biopsychosocial scientific discipline. Brain-behaviour relationships are as intrinsic to psychological science as are behavioural approaches. Patients who seek psychologist consultation frequently use or are considering prescription medications for psychological conditions. Psychologists can only fully serve these patients if they have bio-psychopharmacological as well as psychosocial knowledge to offer. Professional psychology standards should include defining the pharmacological training and continuing education required to adequately understand the impact of medications (Level 1) and provide responsible recommendations to patients and collaborating medical practitioners (Level 2).

In Canada, we often seek political evolution rather than revolution, and there is wisdom to approaching RxP as evolution. Regardless of whether psychologists ultimately take the Level 3 RxP step, psychopharmacological knowledge and credibility are required in order to serve patient needs. It can not be evolutionarily unwise to build a broader foundation of expertise, and keep an open mind as to what will be required in the future. (p. 9)

This statement implies that the advocacy priority is internal rather than external. Pragmatically, the priority is not to seek prescriptive authority at this time, though this statement should not be interpreted to oppose those who seek this route. The priority is to nudge our practitioner training significantly in the direction that our scientific-experimental training has always embodied: a full biological - psychological - social model of understanding human behaviour. The priority at this time is not to create registries of psychologists with psychopharmacological specialties, but to move the centre point of practitioner training in a more biological direction, encompassing necessary psychopharmacological knowledge. This will accomplish the goal of serving psychologists' clients better and also serve to build some necessary credibility as biopsychosocial scientist-practitioners. Finally, it is simply, as noted by McCrea, Enman & Pettifor, (1997), the ethical thing to do in order to serve our clients fully.

VI. Executive Summary

In September 2008, the CPA Prescriptive Authority (RxP) Task Force was charged to consider the relevant professional literature and diversity of opinion towards advising the CPA Board regarding prescription privilege for psychologists in Canada, considering the wisdom and priority of prescription privilege as an advocacy issue. The RxP Task Force, with representatives of Canadian regulatory bodies (ACPRO), provincial associations (CPAP), training accreditation (CCPPP), professional listing service (CRHSPP), and CPA Sections, arrived at the following summary position.

The RxP Task Force affirms the biopsychosocial history and foundation of both the science and practice of the psychology discipline. Psychosocial assessment and interventions (psychotherapy, cognitive-behaviour therapy, and other approaches) have a proven efficacy and should not in any manner be diminished in training requirements or psychology best practice guidelines. However, there are strong rationales for developing a broader training model that is more inclusive of biological and psychopharmacological knowledge. Brain-behaviour relationships are as intrinsic to psychological science as are psycho-social paradigms, and have not always received adequate emphasis in professional training and continuing education. Clients and patients who seek psychologist consultation frequently use or are considering the use of prescription medications for psychological conditions. Psychologists can only fully serve these clients if they have bio-psychopharmacological as well as psychosocial knowledge. Thus, it is both consistent with the scientific scope of the discipline and ethically incumbent on practicing psychologists to be sufficiently knowledgeable about psychopharmacology to understand the psychological effects of medications prescribed to their clients, and to provide evidence based consultation to collaborating medical (and other prescribing) practitioners regarding combined pharmacotherapy-psychotherapy interventions.

The CPA Prescriptive Authority (RxP) Task Force has taken an evolutionary approach towards the future possibility of Canadian psychologists seeking prescriptive authority and regarded making a specific recommendation on this step as premature. The CPA RxP Task Force recommends evolutionary steps in training standards toward enhanced psychopharmacological training and collaborative roles for psychologist practitioners. At this time in psychology's professional history, prescriptive authority should not be precluded as a future step, but neither should it currently be the primary goal and focus of professional advocacy.

Summary Statement

The CPA RxP Task Force considers it is to be the duty of all psychologist practitioners to have basic psychopharmacological knowledge in their areas practice in order to work effectively and ethically with clients. It is thus incumbent on the profession to insure that students in graduate training programs are provided basic psychopharmacological knowledge, and that practitioners are encouraged to obtain continuing education in psychopharmacology. Professional training programs are also encouraged to consider designing curriculum and experiences that prepare students for collaborative, interprofessional, consultation-liaison roles regarding all treatments targeted at improving the psychological well being of their clients.

Conclusions

- a) Basic psychopharmacology is a core element in the psychological science of brain-behaviour relationships, and is relevant to the training of all professional psychologists.
- b) All professional psychologists require a rudimentary understanding of the science and best-practice use of psychopharmacological agents in their area of professional area of practice,
- c) CPA accreditation requirements should specify that all students in accredited doctoral graduate programs in professional psychology receive minimum preparation in basic psychopharmacology.
- d) The introduction of increased biological, physiological and psychopharmacological training should not represent a withdrawal of training in psychosocial interventions.
- e) Specification of undergraduate requirements in biological foundations of behaviour (and other required areas) as a prerequisite to graduate training would assist in preventing undesirable expansions to length of graduate level professional training.
- f) Continuing psychopharmacology education for practitioners of psychology needs to be prioritized. Regulatory bodies should be encouraged to require psychopharmacological continuing education credits within specific psychology specialties. Professional bodies (CPA, CRHSPP, provincial associations) should work collaboratively to provide psychopharmacological continuing education opportunities.
- g) Students in health-related doctoral programs in professional psychology should receive interprofessional training experiences towards providing

knowledgeable collaborative input into medical decision making regarding combined psychotherapy-pharmacotherapy interventions.

- h) The collaborative consultation – liaison model for participating in medical-psychopharmacological decision making, as conceptually defined by APA, has considerable conceptual appeal and further development should be encouraged: further specificity is required regarding the training requirements as well as the regulatory issues pertaining to legal scope of practice.
- i) The profession may not be in an advantageous position at this time to lobby and press for prescriptive authority. Enhanced biopsychosocial training models, with increased bio-psychopharmacological emphasis, would help address these credibility issues and leave the door open for various future developments.
- j) While no specific recommendation is made regarding advocacy towards prescriptive privilege, it is the view of the Task Force that this training, if adopted in Canada at a future point, likely needs to remain primarily postdoctoral in order not to alter radically psychologists' basic preparation for psychological assessment and intervention. A post-doctoral university based RxP Master's Degree approach is the most consistent with Canadian professional training models. RxP programs should be subject to the establishment of accreditation standards. Preferably, RxP post-doctoral training would follow a biopsychosocial foundation obtained in pre-doctoral graduate training and thus be a credible extension of scope of practice.

Recommendations

1. Basic psychopharmacology knowledge should be established as a curriculum requirement for training in psychological professional practice. It is recommended that basic clinical psychopharmacology knowledge, such as could be obtained from a survey course or an equivalent experience, be made a specific Canadian Psychological Association accreditation requirement.
2. It is recommended that psychology regulatory bodies actively promote psychopharmacological continuing education for licensees relevant to their areas of practice. It is recommended that CPA actively work with other psychology associations to provide psychopharmacological continuing education opportunities for practitioners.
3. Professional training programs need to explore training curriculum that better prepare students for biopsychosocial collaborative interprofessional practice models. It is recommended that CPA support university-based training programs developing examples of curricula and experiences that effectively prepare students to dialogue with medical and other prescribing professions

such that the implications of psychological assessments for the potential combinations of evidenced based pharmacotherapy and psychotherapy are fully utilized in treatment decisions in various practice settings. It is noted that psychologists need to practice within legally defined scopes of practice, and that collaborative practice models will require further study by regulatory bodies.

Respectively submitted by
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