Canadian Journal of Counselling and Psychotherapy /
Revue canadienne de counseling et de psychothérapie
ISSN 0826-3893 Vol. 53 No. 4 © 2019 Pages 307–329

Attitudes Towards Interprofessional Education Among Counselling Psychology Graduate Students in Canada
Attitudes des étudiants universitaires en psychologie du counseling à l'égard de la formation interprofessionnelle au Canada

Ellen Klaver
University of Alberta
Nicole Davis
Memorial University of Newfoundland
Elaine Greidanus
University of Lethbridge
Gregory E. Harris
Memorial University of Newfoundland
William Whelton
University of Alberta

ABSTRACT

Students (N = 77) from 3 counselling psychology graduate programs in Canada completed an online questionnaire to assess their attitudes towards interprofessional education (IPE). Data were gathered on students' demographic characteristics, readiness for IPE, and perceptions about teamwork in healthcare. Most participants were female, aged 23–35 years, and were enrolled in a masters-level program with no previous interprofessional work experience. Participants' readiness for IPE and professional stereotype scores were comparable to, if not greater than, scores reported by students in different healthcare disciplines in other studies. Thematic analysis revealed 4 key messages that counselling psychology students learned about interprofessional practice from their graduate programs: (a) there are limited IPE training opportunities for counselling psychology graduate students, (b) teamwork enhances patient care, (c) teamwork may threaten client confidentiality, and (d) the public and other healthcare professions undervalue psychologists in healthcare settings. Implications for the educational and professional development of counselling psychology in Canada are discussed.

RÉSUMÉ

Des étudiants (N = 77) inscrits à 3 programmes universitaires en psychologie du counseling au Canada ont répondu à un questionnaire en ligne conçu pour évaluer leurs attitudes à l'égard de la formation interprofessionnelle (FI). Des données furent recueillies sur les caractéristiques démographiques des étudiants, sur leur degré de préparation à la FI et sur leurs perceptions au sujet des soins de santé prodigués en équipe. La plupart des répondants étaient des femmes, âgées de 23 à 35 ans, et inscrites à un programme de niveau maîtrise sans expérience antérieure du travail interprofessionnel. Les scores des

participants en ce qui concerne la préparation à la FI et les stéréotypes professionnels étaient comparables, sinon supérieurs, aux scores obtenus par des étudiants d'autres disciplines de soins de santé inscrits dans d'autres types d'études. L'analyse thématique révéla 4 messages clés que les étudiants en psychologie du counseling avaient appris au sujet de la pratique interprofessionnelle dans le cadre de leurs programmes universitaires : (a) des possibilités limitées de formation dans le domaine de la FI sont offertes aux universitaires en psychologie du counseling, (b) le travail d'équipe améliore les soins aux patients, (c) le travail d'équipe peut compromettre la confidentialité du client et (d) le public et d'autres professions de soins de santé sous-évaluent les psychologues en contexte de prestation de soins de santé. Il s'en suit une discussion des implications pour le perfectionnement professionnel et de l'enseignement dans le domaine de la psychologie du counseling au Canada.

Counselling and psychotherapy are the most preferred, yet least accessible, mental health services in Canada (Peachey, Hicks, & Adams, 2013; Sunderland & Findlay, 2013). The main barrier to accessing these services is the lack of public funding (Cohen & Peachey, 2014). As a more affordable and accessible alternative, more than 70% of Canadians rely on family physicians for mental health support (Peachey et al., 2013). Physicians, however, rarely receive formal training in counselling and psychotherapy and report a lack of confidence in dealing with mental health concerns (Centre for Addiction and Mental Health, 2016; Clatney, MacDonald, & Shah, 2008). The unmet need for affordable and accessible qualified mental health services has left millions of Canadians in a "silent crisis" (Peachey et al., 2013, p. 3).

The strongest recommendation on how to lift this silence is to include mental health services, namely counselling and psychotherapy, in publicly-funded primary care settings (Canadian Psychological Association [CPA], 2017; Mental Health Commission of Canada, 2017). Primary care settings are characterized by interprofessional care where "providers from different specialties, disciplines, or sectors work together to offer complementary services and mutual support, to ensure that individuals receive the most appropriate service from the most appropriate provider" (Craven & Bland, 2006, p. 9).

Counselling and psychotherapy can be provided by an array of psychosocial health service providers. Which professional is typically best prepared to provide services: psychologists, psychotherapists, counsellors, or mental health aides? The public and healthcare arenas often confuse these mental health professions and default to using these terms interchangeably (Bray, 2010; Grenier, Chomienne, Gaboury, Ritchie, & Hogg, 2008). Failure to distinguish between mental health professions, however, may be contributing to healthcare managers', policymakers', and insurers' failure to recognize and increase funding for more accessible and affordable psychological services in Canada (Hartman, Fergus, & Reid, 2016).

Accordingly, a growing body of literature is dedicated to differentiating psychologists as a distinct profession that is the most appropriate provider of mental health services in primary care settings (e.g., American Psychological Association, 2011, 2015; CPA, 2017; Lilienfeld, 2012; Murdoch, Gregory, &

Eggleton, 2015). For instance, all psychologists are trained as scientists (CPA, 2011; Drapeau & Hunsley, 2014) and receive the highest level of training in the theory, research, and practice of psychotherapy compared to other service providers (Murdoch et al., 2015). Such breadth and depth of knowledge equips psychologists with specific competencies and the ability to carry out distinct roles (e.g., clinician, educator, researcher) that are unique to their profession (Murdoch et al., 2015; Votta-Bleeker & Cohen, 2014).

Unlike other mental health service professions (regulated and unregulated), psychologists are trained with the qualifications to administer, score, and interpret psychological tests (Dozois et al., 2014; Murdoch et al., 2015), which yield results that are as strong and compelling as medical tests (Hunsley, Elliott, & Therrien, 2014; Meyer et al., 2001). Involving psychologists in primary care settings can lead to better clinical outcomes, more efficient use of resources, and "substantial gains at the system level [that] contribute significantly to the overall well-being of Canadians" (Kates et al., 2011, p. 2).

Including a new healthcare profession into interprofessional care settings is a multi-step process that requires a pedagogical shift towards interprofessional education (IPE) at the pre-licensure level (El-Awaisi et al., 2016; Frenk et al., 2010). The first step in this shift is to assess students' attitudes towards teamwork and IPE. Unfortunately, little is known about counselling psychology graduate students' participation in, or attitudes towards, IPE in Canada. This gap is especially true when compared to their counterparts in clinical psychology graduate programs who have recently been introduced to IPE (e.g., Bedi, Klubben, & Barker, 2012; Church, Robinson, & Goodwin, 2009). The purpose of this paper was to assess the attitudes of counselling psychology graduate students toward IPE. To our knowledge, this is the first published study to directly examine these variables among counselling psychology graduate students in Canada.

Interprofessional Care

The World Health Organization ([WHO], 2001) defines health as "physical, mental, and social well-being and not merely the absence of disease or infirmity" (p. 1). This definition reflects the global initiative to understand and treat health concerns with a diverse skill set in healthcare. Teamwork among healthcare professionals can enhance the quality of patient care, lower costs, decrease patients' length of stay, reduce medical errors, increase efficiency, and reduce workloads and burnout as well as increase job satisfaction among healthcare professionals (Canadian Interprofessional Health Collaborative, 2010; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; WHO, 2010). With these benefits at stake, "[i]t is no longer enough for health workers to be professional. In the current global climate, health workers also need to be interprofessional" (WHO, 2010, p. 36).

Traditionally, healthcare professionals were educated and worked in silos (WHO, 2010). To adjust to the need for teamwork, healthcare communities maintained siloed education but adopted collaborative practice. This mismatch

in training and professional practice resulted in disrupted communication, a clash of cultures between different professions, and reinforced negative professional stereotypes (Alaszewski, 2002; Hall, 2005; San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). These interpersonal factors were realized as the greatest barriers to effective teamwork in healthcare (Carpenter, 1995; Institute of Medicine, 2000, 2001). It was clear that working in an interprofessional setting required an understanding of the core components of teamwork and the acquisition of the skills needed for effective collaboration beforehand (WHO, 2012). Therefore, the international healthcare community revised healthcare education and training at the pre-licensure level to foster "the attitudes, knowledge and skills needed to work effectively together" at the professional level (Reeves, 2016, p. 186).

INTERPROFESSIONAL EDUCATION

Interprofessional education (IPE) is defined as having two or more healthcare providers or students from different healthcare disciplines "learn about, from and with each other to improve health outcomes" (WHO, 2010, p. 7). IPE aims to improve student attitudes conducive to effective teamwork by providing students with positive experiences with other professions that instill an appreciation for the roles and responsibilities of different healthcare professions and foster positive professional stereotypes (Interprofessional Education Collaborative, 2016). Positive attitudes contribute to the overall development of interprofessional collaborative knowledge, skills, and behaviour across healthcare disciplines (Riskiyana, Claramita, & Rahayu, 2018). Attitudes develop over time and are deeply rooted in an individual's unique experiences, making attitudes particularly challenging to change. Understanding the theoretical foundations that underlie attitude change can help take on this challenge (Hean et al., 2018).

THEORETICAL FOUNDATION OF IPE

The literature is enriched with sociological, psychological, and educational theories to model the development and change of attitudes among healthcare disciplines (D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu, 2005; Hean, Craddock, & O'Hallaran, 2009). Although there is no one leading theory, the contact hypothesis, social identity theory, and adult learning theory often form the basis of IPE. These theories are typically used because of their congruence with the overarching aim of IPE, their relevance to the complex intergroup dynamics across healthcare professions, and the extent to which they specifically address attitudes (Hean et al., 2009; Hean et al., 2018).

The contact hypothesis (Allport, 1979) suggests that prejudice between groups is naturally overcome and positive perceptions develop when individuals from two different groups interact with and learn from each other. However, contact alone is not enough (Hewstone & Brown, 1986). Conditions that foster attitudinal change

include a controlled, positive, and cooperative atmosphere, an understanding of differences as well as similarities among groups, the experience of working together as equals, and the perception that members of the unfamiliar group are typical and not just exceptions to the perceived stereotypes (Hean & Dickinson, 2005; Tran, Kaila, & Salminen, 2018).

Characteristically, stereotypes are neither positive nor negative but instead are unavoidable cognitive processes used to efficiently organize information (Hilton & von Hippel, 1996). Stereotypes can become harmful when they involve generalizations that lead to prejudiced behaviours, and generate false expectations of others that are realized through self-fulfilling prophecies. Alternatively, stereotypes can become positive when they lead to reasonably accurate and favourable views of others that help individuals navigate the world around them. Likewise, social identity theory (Tajfel, Billig, Bundy, & Flament, 1971) proposes that contact with other groups can change stereotypes by allowing individuals to make informed comparisons between groups and establish a positive distinction between them. Learning how to differentiate via between-group comparison is known as intergroup differentiation (Tajfel et al., 1971; Tajfel & Turner, 1979). This process can help individuals recognize the strengths and weaknesses of their group as well as other groups and facilitate an appreciation of similarities and differences. Therefore, under the appropriate circumstances, contact with other groups can alter the stereotypes that individuals hold of other groups (heterostereotypes) and can also change the stereotypes they hold towards their group (autostereotype) (Hean, Macleod Clark, Adams, Humphris, & Lathlean, 2006b).

The adult learning theory (Knowles, 1990) posits that adults learn best through hands-on learning experiences that stimulate cooperation with one another and support the acquisition of new skills in a controlled environment. Hence, IPE provides students with directed learning opportunities and practical experiences with students from other disciplines. These controlled environments invite students to ask questions, challenge and learn from the differences between professions, and can improve students' attitudes towards teamwork in healthcare (Jacobsen & Lindqvist, 2009; Ko, Bailey-Kloch, & Kim, 2014).

PARTICIPANTS IN IPE

IPE and its core competencies have been adopted, adapted, and advanced as mandatory features of many healthcare education programs (Joerst et al., 2015). Globally, the types of IPE opportunities vary (Herath et al., 2017) and typically involve students from health science programs such as medicine, nursing, audiology, occupational therapy, pharmacy, physiotherapy, podiatry, radiography, and social work (WHO, 2010). In Canada, the most commonly reported healthcare disciplines to participate in IPE and be represented by Health Canada's Accreditation of Interprofessional Health Education (2007) include medicine, nursing, physical therapy, occupational therapy, pharmacy, and social work. While significant progress has been made to include IPE into physical healthcare education

programs, a small but growing body of literature suggests the inclusion of mental health education programs in Canada.

Church et al. (2009) surveyed students enrolled in Canadian graduate psychology programs and asked them about their opportunities to participate in IPE experiences during their training and their perceptions of these IPE experiences. Overall, 61% of students reported that they had some IPE experience, which does not assume full inclusion in an IPE program. These results are generally reflective of clinical psychology programs since more than half of respondents were enrolled in clinical psychology programs. The other half of respondents were from the remaining 18 programs, including counselling psychology. Therefore, Church and colleagues concluded with the recommendation to gather additional data that is reflective of all psychology students' experience with IPE, including those enrolled in counselling psychology programs.

When compared to clinical psychology graduate programs, Canadian counselling psychology graduate programs provide more training in multicultural issues and take a more strengths-based approach (Bedi et al., 2012). This is a key difference considering the multicultural landscape that defines Canada. Although counselling psychologists' unique qualities have been recognized as a potential arsenal to lift Canada's silent crisis, the lack of aggregate data that is needed to inform and develop appropriate IPE opportunities has kept this potential from becoming a practical reality.

Steps Towards Entering IPE and Purpose of the Study

Introducing a healthcare profession into interprofessional care settings is most successful when the profession undergoes IPE at the pre-licensure level (WHO, 2010). For counselling psychology, this means that its graduate programs must undergo educational reform by adopting IPE (Haverkamp, Robertson, Cairns, & Bedi, 2011; Linden, 2015). Pedagogical shifts can be costly, time-consuming, and involve extensive preparation for development, implementation, and evaluation. Therefore, the international IPE community has developed several guidelines to support this shift among healthcare education programs that are preparing for IPE (Buring et al., 2009; El-Awaisi et al., 2016). The first step in these guidelines is to collect data on variables that are known to impact the development, implementation, and effectiveness of IPE opportunities. These variables include students' demographic data and attitudinal constructs related to teamwork in healthcare. Key demographic characteristics include sex, age, level of education, and previous interprofessional work experience (Judge, Polifrini, & Zhu, 2015; O'Carroll, McSwiggan, & Campbell, 2016).

Attitudinal constructs encompass a combination of students' readiness to learn in an IPE context, their value in teamwork, comprehension of the roles and responsibilities of one's profession and those of other professions, and professional stereotypes (Interprofessional Education Collaborative, 2016). Collecting and evaluating this data equips programs with the knowledge to match a theory

to the needs of their students, select the most appropriate methods of learning, and to design successful IPE training programs (Freeth & Reeves, 2004; Judge et al., 2015). These preliminary data also provide a baseline for pre- and post-intervention comparisons used to measure and improve program effectiveness (Reeves, Boet, Zierler, & Kitto, 2014; Rogers et al., 2017) and can influence policy development and official adoption of IPE into the accreditation criteria of a healthcare discipline.

The purpose of this study was to assess Canadian counselling psychology graduate students' demographics and attitudes toward IPE. Participants were recruited from both Alberta and Newfoundland.

METHODS

Participants

Students attending one of three counselling psychology graduate programs in Canada (i.e., University of Lethbridge, Memorial University of Newfoundland, and University of Alberta) were recruited through department-wide emails sent by department administrators. Criteria for eligibility included enrolment in a graduate-level counselling psychology program during the data collection timeframe (between March and October 2015).

Measures

The online survey included items that assessed participants' demographic characteristics, readiness for IPE, professional stereotypes, and perceptions of interprofessional collaboration.

Demographic characteristics. Students were asked to report their sex, age, level of training, and previous interprofessional work experience.

Readiness for IPE. The Readiness for Interprofessional Learning Scale (RIPLS) was initially developed by Parsell and Bligh (1999) and revised by McFadyen, Webster, and Maclaren (2006). It is one of the most frequently used measures to assess students' attitudes towards teamwork before entering IPE (Thistlethwaite, 2015). The scale includes 19 items that are rated on a 5-point Likert scale. The items are divided into three subscales that reflect the main components of students' readiness for IPE. The *teamwork and collaboration* subscale includes nine items, where higher scores indicate more favourable attitudes towards teamwork and shared learning. The *professional identity* subscale includes seven items, where higher scores indicate a greater understanding of one's behaviour and interaction within collaborative care. The *roles and responsibilities* subscale includes three items, where higher scores indicate a greater understanding of the boundaries that delineate roles in professional practice. Together, the three subscales are summed to achieve a total RIPLS score that is used to estimate students' overall readiness for IPE.

Professional stereotypes. The Student Stereotypes Rating Questionnaire (SSRQ) was developed by Barnes, Carpenter, and Dickinson (2000) and adapted by Hean, Macleod Clark, Adams, and Humphris (2006a). It is used to assess students' stereo-

types of other healthcare professionals by rating professions on nine characteristics: academic ability, interpersonal skills, professional competence, leadership, practical skills, independence, confidence, decision-making skills, and being a team player. Each characteristic is rated on a 5-point Likert scale. Ratings on these nine items are summed to yield a total SSRQ score, with higher scores reflecting a more positive overall stereotype of a profession. Because stereotypes are not uni-dimensional constructs, studies that use stereotype scales do not typically focus on the summed score of all items. Instead, scores of different characteristics are often examined, analyzed, and compared to scores of other characteristics (Hean et al., 2006a).

Students' perceptions of interprofessional collaboration. An open-ended question was developed in collaboration by the research team to assess the takeaway messages about interprofessional practice that students have gleaned from their counselling psychology training programs. The question asked, "Reflecting on your training in your program, what are the takeaway messages that you have perceived regarding interprofessional practice?"

Procedure

Ethics approval was granted from the three participating universities. Eligible participants received an invitation email from counselling psychology program administrators at each university. The email briefly described the study and provided a link to the informed consent form and survey.

RESULTS

Data analyses were conducted using IBM Statistical Package for the Social Sciences (SPSS, version 23). A total of 80 students provided informed consent to participate in the survey. Three respondents did not continue beyond consenting to participate and therefore did not provide any data. Data from the remaining 77 participants were used. Before any analyses were conducted, negatively worded items were reverse-scored so that high scores reflected favourable attitudes for all measures. Preliminary analyses were performed to identify any outliers. There were no outliers.

Demographic Characteristics

As displayed in Table 1, most participants were female (n = 67), aged between 23–26 years old (n = 19) and 31–35 years old (n = 18), were enrolled in a masters-level program (n = 67), and did not have previous interprofessional work experience (n = 55). The correlational analysis assessed whether these four demographic characteristics were associated with the students' readiness for IPE or their professional stereotypes. Previous interprofessional work experience was associated with higher scores on the *roles and responsibilities* subscale of the RIPLS, $r(75) = .24$, $p < .036$. Other than this finding, there were no statistically significant correlations between the four demographic characteristics and participants' RIPLS or SSRQ scores.

Table 1
Demographic Characteristics

Variable	*n*	Percent (%)
Sex	77	
Female	67	87.0
Male	10	13.0
Age	76	
17–22	1	1.3
23–26	19	24.7
27–30	14	18.2
31–35	18	23.4
36–40	12	15.6
40+	12	15.6
Level of graduate program	77	
Master's	67	87.0
Doctoral	10	13.0
Interprofessional work experience	77	
Yes	22	28.6
No	55	71.4

Readiness for IPE

The total RIPLS scores ranged from 60 to 95. Summary statistics are provided in Table 2. Cronbach's alpha for the 19 items of the RIPLS was .86. Cronbach's alpha for each subscale was $\alpha = .85$ for the *teamwork and collaboration* subscale, $\alpha = .83$ for the *professional identity* subscale, and $\alpha = .27$ for the *roles and responsibilities* subscale. The poor reliability for the *roles and responsibilities* subscale is consistent with Parsell and Bligh (1999; $\alpha = .32$) who argued that the low alpha was primarily due to the brevity of a three-item subscale.

Table 2
Readiness for Interprofessional Learning Scale Total and Subscale Scores

Variable	*n*	*M* (*SD*)
Readiness to Learn	74	82.97 (7.57)
Teamwork and collaboration subscale	76	40.51 (3.98)
Professional identity subscale	75	30.41 (3.71)
Roles and responsibilities subscale	77	11.99 (1.78)

A repeated measure analysis of variance (ANOVA) was conducted to identify differences between students' mean subscale scores on the RIPLS, adjusted for the number of items per subscale. There were statistically

significant differences between the RIPLS subscale scores, $F(2, 146) = 24.76$, $p < .001$, $\eta^2_p = .362$. Bonferroni *post hoc* tests revealed that participants scored higher on the *teamwork and collaboration* subscale ($M = 4.51$, $SD = .44$) than the *professional identity* subscale ($M = 4.35$, $SD = .53$; $p < .007$) and the *roles and responsibilities* subscale ($M = 4.00$, $SD = .61$; $p < .001$). Subscale scores were higher on the *professional identity* subscale over the *roles and responsibility* subscale ($p < .001$).

Professional Stereotypes

The total SSRQ scores for each profession ranged from 29 to 45. Summary statistics are provided in Table 3. A repeated measure ANOVA was conducted on the total stereotype scores assigned to each profession, including their own of counselling psychologist, and revealed statistical significance, $F(4, 272) = 16.50$, $p < .001$, $\eta^2_p = .195$. Bonferroni *post hoc* test alpha was set at $p < .01$ for the overall stereotype scores, revealing several statistically significant differences. For example, compared to the overall stereotypes of their own profession (autostereotypes), counselling psychology graduate students assigned lower overall stereotype scores to medical doctors.

Table 3
Mean (SD) SSRQ Scores Assigned by Counselling Psychology Students to Health Profession

Profession	*M* (*SD*)
Counselling psychologists	37.85 (*4.20*)[a]
Nurses	36.58 (*4.53*)[a]
Occupational therapists	35.67 (*4.44*)[a]
Medical doctors	35.39 (*4.02*)[b]
Social workers	33.64 (*5.42*)[a]

Note. Number of participants in this analysis was 69. Means sharing the same superscript are not different from each other for comparisons between ratings of counselling psychologists to other occupations (Bonferroni, $p < .01$).

As mentioned, SSRQ scores yield greater insight when scores of each characteristic are examined. Therefore, further analyses were conducted to provide a more detailed assessment of participants' stereotypes of their own profession (autosteoreotypes) and other professions (heterostereotypes). Repeated measures ANOVAs were used to compare the mean scores of each characteristic within the SSRQ. Results for each of the nine stereotype characteristics are presented in Table 4. Bonferroni *post hoc* test alpha was set at .01, given the number of tests conducted.

Table 4
Mean (SD) Ratings of Selected Characteristics Assigned by Counselling Psychology Students to Different Health Professions

Stereotype characteristic	Counselling psychologists	Medical doctors	Nurses	Social workers	Occupational therapists
Academic ability	4.37 (.56)[a]	4.59 (.57)[a]	4.11 (.70)[b]	3.63 (.85)[b]	4.03 (.62)[b]
Professional competence	4.28 (.62)[a]	4.18 (.58)[a]	4.32 (.62)[a]	3.76 (.77)[b]	4.07 (.60)[a]
Interpersonal skills	4.70 (.52)[a]	3.01 (.83)[b]	4.07 (.79)[b]	3.87 (.95)[b]	3.91 (.78)[b]
Leadership abilities	3.86 (.78)[a]	3.54 (.81)[a]	3.58 (.80)[a]	3.56 (.90)[a]	3.62 (.74)[a]
Work independently	4.41 (.64)[a]	3.93 (.99)[b]	3.84 (.83)[b]	3.77 (.86)[b]	4.00 (.70)[b]
Team player	3.89 (.70)[a]	3.17 (.96)[b]	4.26 (.74)[b]	3.84 (.92)[a]	3.91 (.71)[a]
Decision making	4.11 (.71)[a]	4.26 (.64)[a]	3.92 (.77)[a]	3.72 (.80)[b]	3.93 (.60)[a]
Practical skills	4.22 (.67)[a]	4.11 (.70)[a]	4.47 (.58)[a]	3.83 (.80)[b]	4.20 (.64)[a]
Confidence	4.03 (.83)[a]	4.50 (.68)[b]	4.07 (.68)[a]	3.84 (.74)[a]	4.01 (.66)[a]

Note. Number of participants range from 72 to 74. Means sharing the same superscript, per stereotype characteristic, are not different from each other (Bonferroni, $p < .01$) for comparisons between Counselling psychologists to other occupations.

Academic ability. The ANOVA was statistically significant, $F(4, 288) = 32.37$, $p < .001$, $\eta_p^2 = .310$. Participants assigned significantly higher scores on academic ability to counselling psychologists compared to social workers and occupational therapists, but not medical doctors or nurses.

Professional competence. The ANOVA was statistically significant, $F(4, 292) = 14.65$, $p < .001$, $\eta_p^2 = .167$. Participants assigned significantly higher scores of professional competence to counselling psychologists over social workers.

Interpersonal skills. The ANOVA was statistically significant, $F(4, 292) = 51.71$, $p < .001$, $\eta_p^2 = .415$. Counselling psychologists were assigned a higher score on interpersonal skills compared to the other four professions.

Leadership. The ANOVA was statistically significant, $F(4, 292) = 2.74$, $p < .03$, $\eta_p^2 = .036$. Bonferroni *post hoc* tests revealed no statistically significant differences in leadership scores for counselling psychologists compared to the other professions.

Ability to work independently. The ANOVA was statistically significant, $F(4, 292) = 9.91$, $p < .001$, $\eta_p^2 = .120$. Counselling psychologists were assigned higher scores on the ability to work independently compared to the other four professions.

Ability to be a team player. The ANOVA was statistically significant, $F(4, 288) = 25.93$, $p < .001$, $\eta_p^2 = .265$. Counselling psychologists received a higher score than medical doctors but lower score than nurses on the ability to be a team player.

Ability to make decisions. The ANOVA was statistically significant, $F(4, 284) = 9.89$, $p < .001$, $\eta_p^2 = .122$. Counselling psychologists were scored higher on the ability to make decisions compared to social workers.

Practical skills. The ANOVA was statistically significant, $F(4, 292) = 12.89$, $p < .001$, $\eta_p^2 = .150$. Participants assigned greater practical skills to counselling psychologists than social workers.

Confidence. The ANOVA was statistically significant, $F(4, 288) = 14.47$, $p < .001$, $\eta_p^2 = .167$. Counselling psychologists were rated as less confident than medical doctors.

Students' Perceptions About Interprofessional Collaboration

Fifty-seven participants answered the survey question, "Reflecting on your training in your program, what are the takeaway messages that you have perceived regarding interprofessional practice?" Responses were transferred to a word document and analyzed for keywords and/or phrase repetitions. Once the text was analyzed, and keywords/phrases were organized, four major themes emerged.

Theme 1: Limited IPE training opportunities for counselling psychology graduate students. Twenty-three participants perceived that counselling psychology graduate students had minimal IPE training opportunities in their graduate programs. Of these respondents, 20 students reported that IPE was either rarely addressed or not discussed at all in their programs by expressing "we haven't been trained in this topic at all." Three students indicated that they did not experience opportunities for interprofessional practice until they began their internship or had entered the workforce where teamwork between professions was practiced.

Theme 2: Teamwork enhances patient care. Students (n = 22) perceived that interprofessional practice in healthcare was a critical component to delivering high-quality care and promoting enhanced client/patient experiences. Moreover, students acknowledged that collaboration may be complex and challenging but would increase counselling psychologists' knowledge and self-awareness. One participant summarized this theme in the following statement:

> Interprofessional practice is crucial, and best practice as we as counsellors are only able to help clients with one aspect of their life, working with other health professionals can provide clients with more comprehensive care—however, it is very challenging to work on an interprofessional team due to the wide range of mental health/physical health perspectives and approaches.

Theme 3: Teamwork may threaten client confidentiality. Seven students perceived that teamwork in healthcare might jeopardize client confidentiality and other practice ethics. For example, one student responded:

> In some ways, I have learned [that teamwork] would be beneficial, and others I have been cautioned of the confidentiality constraints. Also, there's no training specific to interprofessional teamwork or how to achieve it; I feel this was a very grey area in my master's program.

Theme 4: The public and other healthcare professions undervalue psychologists in healthcare settings. Five students reported the perception that members of the public and other healthcare professions viewed the role of the psychologist as being least important in healthcare, relative to other healthcare professionals. One student wrote, "My perception is that psychological services are undervalued though the research shows they are very effective…" Similarly, students perceived that the primary focus in healthcare was on services that attended to physical health concerns rather than psychological health concerns.

DISCUSSION

Sex, age, level of training, and previous interprofessional work experience did not have significant associations with counselling psychology graduate students' readiness for IPE or professional stereotypes of their own profession or other professions. These findings are unlike those reported in previous studies (e.g., Lie, Fung, Trial, & Lohenry, 2013; Mandy, Milton, & Mandy, 2004). For example, Ko et al., (2014) assessed attitudes towards IPE among students enrolled in graduate-level medicine, nursing, pharmacy, and social work programs. Female students, older students, and students with experience working in interprofessional settings reported more positive attitudes towards interprofessional learning and practice than their counterparts.

The null findings in the present study may be a result of the study's limitations. These limitations included that, regarding the participants, there were (a) six times as many women compared with men, making sex differences more difficult to

detect; (b) six times as many master's level students as doctoral level students; and, (c) significantly fewer students with previous interprofessional training or work experiences in graduate-level counselling psychology programs. These limitations might have biased the results.

Counselling psychology graduate students reported a readiness for IPE that was comparable to, if not higher than, the readiness for IPE that has been reported in most studies with students from medicine and nursing (e.g., Keshtkaran, Sharif, & Rambod, 2014). This was also true when participants' readiness scores were compared to scores of students who were enrolled in programs such as clinical laboratory science, dental hygiene, dental therapy, dentistry, occupational therapy, pharmacy, public health, or veterinary medicine (Stull & Blue, 2016).

Counselling psychology graduate students' overall stereotype scores of their profession (autostereotypes) were higher than the total stereotype scores assigned to other professions (heterostereotypes). This polarity between auto- and hetero- stereotypes is a consistent finding among students in a variety of disciplines (e.g., Cook & Stoecker, 2014; Hind et al., 2003). Of the overall stereotype scores (i.e., total SSRQ) and specific stereotype characteristics (e.g., academic ability) reported in this study, perhaps the most interesting was participants' scores assigned to social workers, which were the lowest across the board. One possible explanation for this result may be that participants were unaware of or uninformed about the roles of social workers in healthcare teams and therefore rated them poorly. This conjecture coincides with the theoretical underpinning of the contact hypothesis and social identity theory, whereby students are more likely to rate their profession as more favourable simply because they know more about their profession. Moreover, students' low appraisal of social workers may reflect counselling psychology graduate students' concern for having overlapping professional roles with social work, which poses a threat to job security (Baker, Egan-Lee, Martimianakis, & Reeves, 2011).

Counselling psychology graduate students provided four key perceptions about interprofessional collaboration. First, their concern for limited IPE opportunities in their training programs corresponded with Church et al.'s (2009) findings that reflect the need for greater interprofessional activities and education among psychology graduate programs in Canada. Despite limited IPE opportunities in their programs, counselling psychology students still viewed teamwork as a form of best practice that enhanced care and patient satisfaction—which are benefits of collaborative care (WHO, 2010). Valuing a holistic and team-based approach reflect the most commonly espoused theoretical orientations in eclecticism/integrationism and client-centred/humanistic approaches in counselling psychology (Bedi, Sinacore, & Christiani, 2016; Gazzola, Smith, King-Andrews, & Kearney, 2010).

Counselling psychology graduate students' concern for patient confidentiality in an interprofessional context relates to the extent to which the public values confidentiality in counselling or psychotherapy settings. In a study of people who had never accessed psychological services, Gothjelpsen and Truscott (2018)

found that a psychologist's trustworthiness was held to be of paramount importance. Although all healthcare providers indeed have an ethical duty to maintain confidentiality, the importance seems amplified when it comes to psychological well-being and mental health. Perhaps it is the stigma that continues to surround mental health issues, which may generate greater concern for privacy and confidentiality of personal psychological problems. These concerns can be magnified even further in interprofessional settings where the nature of the presenting issues and associated ethical dilemmas are increasingly complex (Machin et al., 2018; Paproski & Haverkamp, 2000). Therefore, it is more important than ever for counselling psychology graduate students to learn how to manage confidentiality in team settings with other healthcare professionals. Participation in IPE can provide opportunities that allow students to experience the benefits of managing complex cases as a team.

Students in the present study are not alone in their perception that the public and other healthcare professions undervalue the profession of psychology. Gazzola, De Stefano, Audet, and Theriault (2011) used a semi-structured interview protocol to understand how counselling psychology doctoral students thought others perceived counselling psychology as a profession. Students believed that the public and other healthcare professions viewed "counselling psychology low on the mental health hierarchy and that there was a stigma against counselling psychology" (p. 266). Students in Gazzola et al.'s study also reported the need for their training programs to take a more active role in shaping their professional identity at the pre-licensure level.

Limitations

The present study included only counselling psychology graduate students, and thus the findings may not generalize to students in other mental health education programs. The present study also faced limitations of instrumentation, sample size, and response rate. When developing the RIPLS, Parsell and Bligh (1999) did not determine a threshold score for ascertaining students' readiness for IPE. Therefore, there were no official cut off points used to differentiate levels of readiness. The absence of threshold or cut off scores also applies to the SSRQ, where no pre-determined threshold was identified to classify students' professional stereotypes as "positive" or "negative" (Hean, 2009). Instead, results are often used as benchmarks to compare scores from one group of students to those of another group, and can be used to determine a baseline score before entering IPE. The consensus is that more robust psychometric measures of student readiness for IPE and professional stereotypes need to be developed for accurate assessment of these constructs (Oates & Davidson, 2015; Rogers et al., 2017).

The response rate must also be considered when evaluating the findings from the present study. Approximately 300 students were contacted via email to participate, and of the 80 students who initially consented to participate, 77 completed the survey and provided useable data. It is possible that self-selection bias was at play, such that students with strong views on interprofessional learning and practice

were more likely to complete the questionnaire. Likewise, students without strong opinions on, or limited awareness of, interprofessional learning may have been less inclined to participate.

Future Implications

The overall scope of counselling psychology in Canada is rather uniform (Bedi, 2016; Bedi et al., 2012) and therefore, the results from the present study may be generalized to counselling psychology graduate programs across Canada. The revision of counselling psychology's educational programs to adopt IPE has several implications. These implications involve educational reform in counselling psychology graduate programs, crystallization of the profession's unique identity, enhanced visibility within the public healthcare system, and greater accessibility to counselling services in Canada.

Educational Reform

The Counselling Psychology Section of the Canadian Psychological Association continues to revise its education and training to best prepare graduates for the workforce (Haverkamp et al., 2011). The findings from the present study help inform some of these revisions. For instance, counselling psychology graduate students reported a relatively negative stereotype of the social work profession. This finding implies the need for counselling psychology graduate programs to focus on IPE opportunities that pay particular attention to understanding and being exposed to the social work profession. In line with the contact hypothesis, shared learning experiences in IPE can allow students from counselling psychology and social work programs to learn more about each other's roles, overcome negative perceptions of one another, and increase collaborative efforts (Hean & Dickinson, 2005). In principle, this exposure would maximize differences, promote intergroup differentiation, and foster role security. The opportunity to learn more about the shared responsibilities of counselling psychologists and other healthcare professionals, especially social workers, has the potential to mitigate rivalries and turf wars between professions and can strengthen counselling psychology's professional identity (Barnes et al., 2000).

Negotiating the nuances among confidentiality and ethical standards of different healthcare professions can be difficult. Findings from the present study suggest that IPE opportunities for counselling psychology graduate programs ought to focus on confidentiality and cross-disciplinary ethical concerns. IPE opportunities can be tailored to address these concerns and teach negotiation principles through different learning approaches. These goals can be achieved by intentionally embedding ethics-oriented courses and IPE experiences into the IPE curriculum (Machin et al., 2018). Finding the right combination of opportunities, however, takes time and programs are encouraged to engage in "a gradual implementation of IPE with the motto 'start small and go slow' […] so that some successes can be realized and modifications can be made with each iteration of the IPE curriculum" (Buring et al., 2009, p. 6). For example, changing

one portion of training, such as the practicum component, is less disruptive to the students' education when compared to revising the entire curriculum at once but is still consistent with the adult learning theory. One way that an educational program can refine the practicum component is involving more interprofessional experience and placements (Vereen et al., 2018). Brewer and Barr (2016) used their award-winning team-based interprofessional practice placement approach to guide programs on how to make this adjustment.

Counselling psychology graduate programs may initiate opportunities to learn with and from other disciplines through interprofessional supervision (Arthur & Russell-Mayhew, 2010). The effectiveness of IPE ultimately begins with the faculty members and facilitators leading it. This reality makes it critical to assess faculty and supervisor attitudes toward shared learning and perceptions of collaborative care (Oandasan & Reeves, 2005). A series of practice guidelines specific to preparing faculty and staff for IPE and team-based instruction have been tested and shown to positively impact participants and their institutions (Blakeney, Pfeifle, Jones, Hall, & Zierler, 2016; Hall & Zierler, 2015).

Professional Identity and Public Accessibility

As the newest section of the CPA, it is understandable that counselling psychology is still in the process of crystallizing its professional identity and differentiating itself from other mental health care professions (Bedi et al., 2016). Including counselling psychology graduate students into IPE can help accelerate this process (Olson & Bialocerkowski, 2014; Vereen et al., 2018). The importance of solidifying counselling psychology's professional identity extends beyond the discipline itself and into the greater healthcare system (Mental Health Commission of Canada, 2017). Currently, counselling psychologists most commonly work in private or independent practice settings (Bedi et al., 2016; CPA, 2016) where their services are not typically funded (Centre for Addiction and Mental Health, 2016).

Counselling psychology's unsolidified professional identity may limit their distinctiveness from other mental health care providers and result in limited funding for their services (Cohen & Peachey, 2014; Hartman et al., 2016; Haverkamp et al., 2011). Participating in IPE provides the opportunity to compare and contrast one's profession to other professions and thereby develop a better understanding of one's own professional identity. Counselling psychologists must acquire the skills to continue working with different healthcare professions to improve their visibility and increase accessibility and affordability of counselling and psychotherapy (Cubic, Mance, Turgesen, & Lamanna, 2012; Hartman et al., 2016).

CONCLUSION

There is a call for the Canadian counselling psychology community to use the literature and public needs to understand and facilitate future adaptations and defining moments for Canadian counselling psychology (Young & Lalande,

2011). The present study responded to this call by spotting a gap in the literature on counselling psychology graduate students' participation in IPE307

and recognizing the need for counselling in Canada. Provided its importance to the profession and the public, we foresee that the next defining moment for the Counselling Psychology Section of the Canadian Psychological Association will be to include counselling psychology graduate programs in IPE. Using the guidelines provided by the international IPE community, we took the first step towards this defining moment by assessing counselling psychology graduate students' demographic characteristics and attitudinal constructs related to interprofessional education and practice.

Aggregating this data provides a single-point estimate of counselling psychology graduate students' readiness for IPE, professional stereotypes of different healthcare professions, and perceptions of interprofessional teamwork in healthcare. These estimate scores can be used to inform the development, implementation, and evaluation of IPE in counselling psychology graduate programs in Canada. With greater involvement in IPE, counselling psychology can begin claiming its place within public healthcare teams and helping to advance psychology for all.

References

Accreditation of Interprofessional Health Education. (2007). *Principles and practices for integrating interprofessional education into the accreditation standards for six health professions in Canada*. Retrieved from https://casn.ca/wp-content/uploads/2014/12/AIPHEPrinciplesandPractices-Guidev2EN.pdf

Alaszewski, A. (2002). The impact of the Bristol Royal Infirmary disaster and inquiry on public services in the UK. *Journal of Interprofessional Care, 16*(4), 371–378. https://doi.org/10.1080/13561-82021000008319

Allport, G. W. (1979). *The nature of prejudice.* Cambridge, MA: Perseus Books.

American Psychological Association. (2011). *Report of the Primary Care Training Task Force to the APA Board of Educational Affairs.* Retrieved from http://www.apa.org/ed/graduate/task-force-report.pdf

American Psychological Association. (2015). *Competencies for psychology practice in primary care.* Retrieved from http://www.apa.org/ed/resources/competencies-practice.pdf

Arthur, N., & Russell-Mayhew, S. (2010). Preparing counsellors for interprofessional collaboration through supervision and lateral mentoring. *Canadian Journal of Counselling, 44*(3), 258–271.

Baker, L., Egan-Lee, E., Martimianakis, M. A., & Reeves, S. (2011). Relationships of power: Implications for interprofessional education. *Journal of Interprofessional Care, 25*, 98–104. https://doi.org/10.3109/13561820.2010.505350

Barnes, D., Carpenter, J., & Dickinson, C. (2000). Interprofessional education for community mental health: Attitudes to community care and professional stereotypes. *Social Work Education: The International Journal*, *19*, 565–583. https://doi.org/10.1080/02615470020002308

Bedi, R. (2016). A descriptive examination of Canadian counselling psychology doctoral programs. *Canadian Psychology, 57*(2), 83–91.

Bedi, R. P., Klubben, L. M., & Barker, G. T. (2012). Counselling vs. clinical: A comparison of psychology doctoral programs in Canada. *Canadian Psychology, 53*(3), 238–253. https://doi.org/10.1037/a0028558

Bedi, R., Sinacore, A., & Christiani, K. (2016). Counselling psychology in Canada. *Counselling Psychology Quarterly*, *29*(2), 150–162. https://doi.org/10.1080/09515070.2015.1128398

Blakeney, E. A., Pfeifle, A., Jones, M., Hall, L. W., & Zierler, K. B. (2016). Findings from a mixed methods study of an interprofessional faculty development program. *Journal of Interprofessional Care*, *30*(1), 83–89. https://doi.org/10.3109/13561820.2015.1051615

Bray, J. H. (2010). The future of psychology practice and science. *American Psychologist, 65*(5), 355–369. https://doi.org/10.1037/a0020273

Brewer, M. L., & Barr, H. (2016). Interprofessional education and practice guide no. 8: Team-based interprofessional practice placements. *Journal of Interprofessional Care, 30*(6), 747–753. https://doi.org/10.1080/13561820.2016.1220930

Buring, S. M., Bhushan, A., Broeseker, A., Conway, S., Duncan-Hewitt, W., Hansen, L., & Westberg, S. (2009). Interprofessional education: Definitions, student competencies, and guidelines for implementation. *American Journal of Pharmaceutical Education, 73*(4), 1–8. https://doi.org/10.5688/aj730459

Canadian Interprofessional Health Collaborative (IPEC). (2010). *A national interprofessional competency framework*. Retrieved from https://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

Canadian Psychological Association (CPA). (2011). Accreditation standards and procedures for doctoral programmes and internships in professional psychology (5th rev.). Ottawa, ON: Author.

Canadian Psychological Association (CPA). (2016). *The 2015 psychology graduate survey (PGS): Final report*. Retrieved from https://cpa.ca/docs/File/Publications/PGS_Final_Report_7Dec2016_ENFinal.pdf

Canadian Psychological Association (CPA). (2017). *Canada's psychologists contributing to primary health care*. Retrieved from https://cpa.ca/docs/File/PracticeDirectorate/StrengtheningPrimaryCare-FINAL_SEPTEMBER_8_2017.pdf

Carpenter, J. (1995). Doctors and nurses: Stereotypes and stereotype change in interprofessional education. *Journal of Interprofessional Care, 9*, 151–161. https://doi.org/10.3109/13561829509047849

Centre for Addiction and Mental Health. (2016). *Mental health and primary care policy framework*. Retrieved from https://www.camh.ca/-/media/files/pdfs---public-policy-submissions/primarycarepolicyframework_march2016-pdf.pdf

Church, E., Robinson, L., & Goodwin, J. (2009, June). *Students' perspectives on interprofessional education in Canadian graduate psychology programs.* Paper presented at the annual conference of the Canadian Psychological Association, Montreal, QC. Retrieved from https://cpa.ca/cpasite/UserFiles/Documents/survey%20results%20-students%20summary%202009.pdf

Clatney, L., MacDonald, H., & Shah, S. (2008). Mental health care in the primary care setting: Family physicians' perspectives. *Canadian Family Physician, 54*(6), 884–889.

Cohen, K. R., & Peachey, D. (2014). Access to psychological services for Canadians: Getting what works to work for Canada's mental and behavioral health. *Canadian Psychology, 55*(2), 126–130. https://doi.org/10.1037/a0036499

Cook, K., & Stoecker, J. (2014). Healthcare student stereotypes: A systematic review with implications for interprofessional collaboration. *Journal of Research in Interprofessional Practice and Education*, *4*(2), 1–13. https://doi.org/10.22230/jripe.2014v4n2a151

Craven, M. A., & Bland, R. (2006). Better practices in collaborative mental healthcare: An analysis of the evidence base. *Canadian Journal of Psychiatry, 51*(6), 7–72.

Cubic, B., Mance, J., Turgesen, J. N., & Lamanna, J. (2012). Interprofessional education: Preparing psychologists for success in integrated primary care. *Journal of Clinical Psychology in Medical Settings, 19,* 84–92. https://doi.org/10.1007/s10880-011-9291-y

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care, 1,* 116–131. https://doi.org/10.1080/13561820500082529

Dozois, D. J., Mikail, S. F., Alden, L. E., Bieling, P. J., Bourgon, G., Clark, D. A., … Johnston, C. (2014). The CPA presidential task force on evidence-based practice of psychological treatments. *Canadian Psychology, 55*(3), 153–160. https://doi.org/10.1037/a0035767

Drapeau, M., & Hunsley, J. (2014). Where's the science? Introduction to a special issue of *Canadian Psychology* on science in psychology. *Canadian Psychology, 55*(3), 145–152. https://doi.org/10.1037/a0037321

El-Awaisi, A., Anderson, E., Barr, H., Wilby, K., Wilbur, K., & Brainbridge, L. (2016). Important steps for introducing interprofessional education into health professional education. *Journal of Taibah Medical Sciences, 11*(6), 546–551. https://doi.org/10.1016/j/jtumed.2016.09.004

Freeth, D., & Reeves, S. (2004). Learning to work together: Using the presage, process, product (3P) model to highlight decisions and possibilities. *Journal of Interprofessional Care*, *18*(1), 43–56. https://doi.org/10.1080/13561820310001608221

Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., … Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet, 376*, 1923–1958. https://doi.org/10.1016/S0140-6736(10)61854-5

Gazzola, N., De Stefano, J., Audet, C., & Theriault, A. (2011). Professional identity among counselling psychology doctoral students: A qualitative investigation. *Counselling Psychology Quarterly, 24*(4), 257–275. https://doi.org/10.1080/09515070.2011.630572

Gazzola, N., Smith, J. D., King-Andrews, H. L., & Kearney, M. K. (2010). Professional characteristics of Canadian counsellors: Results of a national survey. *Canadian Journal of Counselling and Psychotherapy*, *44*(2), 83–99.

Grenier, J., Chomienne, M. H., Gaboury, I., Ritchie, P., & Hogg, W. (2008). Collaboration between family physicians and psychologists: What do family physicians know about psychologists' work? *Canadian Family Physician, 54*(2), 232–233.

Gothjelpsen, S., & Truscott, D. (2018). How do Canadians rank the Canadian code of ethics for psychologists' principles? *Canadian Psychology, 59*(1), 31–37. https://doi.org/10.1037/cap0000133

Hall, P. (2005). Interprofessional teamwork: Professional cultures as barriers. *Journal of Interprofessional Care, 1*, 188–196. https://doi.org/10.1080/13561820500081745

Hall, L. W., & Zierler, B. K. (2015). Interprofessional education and practice guide no. 1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care*, *29*(1), 3–7. https://doi.org/10.3109/13561820.2014.937483

Hartman, L. I., Fergus, K. D., & Reid, D. W. (2016). Psychology's Gordian Knot: Problems of identity and relevance. *Canadian Psychological Association, 57*(3), 149–159. https://doi.org/10.1037/cap0000060

Haverkamp, B., Robertson, S., Cairns, S., & Bedi, R. (2011). Professional issues in Canadian counselling psychology: Identity, education, and professional practice. *Canadian Psychology/Psychologie canadienne*, *52*(4), 256–264. https://doi.org/10.1037/a0025214

Hean, S. (2009). The measurement of stereotypes in the evaluation of interprofessional education. In J. Jackson & P. Blateau (Eds.), *Innovation, implementation and evaluation: The keys to unlocking interprofessional learning* (pp. 143–164). Basingstoke, UK: Palgrave Macmillan.

Hean, S., Craddock, D., & O'Hallaran, C. (2009). Learning theories and interprofessional education: A user's guide. *Learning in Health and Social Care, 8*(4), 250–262. https://doi.org/10.1111/j.1473-6861.2009.00227.x

Hean, S., & Dickinson, C. (2005). The contact hypothesis: An exploration of its further potential in interprofessional education. *Journal of Interprofessional Care, 19*(5), 480–491.

Hean, S., Green, C., Anderson, E., Morris, D., John, C., Pitt, R., & O'Halloran, C. (2018). The contribution of theory to the design, delivery, and evaluation of interprofessional curricula: BEME guide no. 49. *Medical Teacher, 40*(6), 543–558. https://doi.org/10.1018/0142159X.2018.1432851

Hean, S., Macleod Clark, J., Adams, K., & Humphris, D. (2006a). Will opposites attract? Similarities and differences in students' perceptions of the stereotype profiles of other health and social care professional groups. *Journal of Interprofessional Care, 20*(2), 162–181. https://doi.org/10.1080/13461820600646546

Hean, S., Macleod Clark, J., Adams, K., Humphris, D., & Lathlean, J. (2006b). Being seen by others as we see ourselves: The congruence between the in-group and out-group perceptions of health and social care students. *Learning in Health and Social Care, 5*(1), 10–22. https://doi.org/10.1111/j.1473-6861.2006.00108

Herath, C., Zhou, Y., Gan, Y., Nakandawire, N., Gong, Y., & Lu, Z. (2017). A comparative study of interprofessional education in global health care: A systematic review. *Medicine, 96*(38), 1–7. https://doi.org/10.1097/MD.0000000000007336

Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the contact hypothesis. In M. Hewstone & R. Brown (Eds.), *Social psychology and society: Contact and conflict in intergroup encounters* (pp. 1–44). Cambridge, MA: Basil Blackwell.

Hilton, J. L., & von Hippel, W. (1996). Stereotypes. *Annual Review of Psychology, 47*, 237–271. https://doi.org/10.1146/annurev.psych.47.1.237

Hind, M., Norman, I., Cooper, S., Gill, E., Hilton, R., Judd, P., & Jones, S. C. (2003). Interprofessional perceptions of health care students. *Journal of Interprofessional Care*, *17*(1), 21–34.

Hunsley, J., Elliott, K. P., & Therrien, Z. (2014). The efficacy and effectiveness of psychological treatments for mood, anxiety, and related disorders. *Canadian Psychology, 55*(3), 161–176. https://doi.org/10.1037/a0036933

Institute of Medicine. (2000). *To err is human: Building a safer health system.* Washington, DC: National Academies Press.

Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.

Interprofessional Education Collaborative. (2016). *Core competencies for interprofessional collaborative practice* (IPEC Board Update). Retrieved from https://hsc.unm.edu/ipe/resources/ipec-2016-core-competencies.pdf

Jacobsen, F., & Lindqvist, S. (2009). A two-week stay in an interprofessional training unit changes students' attitudes to health professionals. *Journal of Interprofessional Care, 23*(3), 242–250. https://doi.org/10.1080/13561820902739858

Joerst, K., Callendar, B., Adam, V., Evert, K., Fields, E., Hall, T., … Wilson, L. L. (2015). Identifying interprofessional global health competencies for 21st-century health professionals. *Annals of Global Health, 81*(2), 239–247. https://doi.org/10.1016/j.aogh.2015.03.006

Judge, M. P., Polifrini, E. C., & Zhu, S. (2015). Influence of student attributes on readiness for interprofessional healthcare disciplines: Identifying factors to inform educational development. *International Journal of Nursing Sciences, 2,* 248–252. https://doi.org/10.1016/j.ijnss.2015.07.007

Kates, N., Mazowita, G., Lemire, F., Jayabarathan, A., Bland, R., Selby, P., … Audet, D. (2011). The evolution of collaborative mental healthcare in Canada: A shared vision for the future. *Canadian Journal of Psychiatry, 56*(5), 1–10.

Keshtkaran, Z., Sharif, F., & Rambod, M. (2014). Students' readiness for and perception of interprofessional learning: A cross-sectional study. *Nurse Education Today, 34*(6)*,* 991–998. https://doi.org/10.1016/j.nedt.2013.12.008

Knowles, M. S. (1990). *The adult learner: A neglected species.* Houston, TX: Gulf Publishing.

Ko, J., Bailey-Kloch, M., & Kim, K. (2014). Interprofessional experiences and attitudes toward interprofessional healthcare teams among health sciences students. *Social Work Health Care, 53*(6), 552–567. https://doi.org/10.1080/00981389.2014.903884

Lie, D. A., Fung, C. C., Trial, J., & Lohenry, K. (2013). A comparison of two scales for assessing health professional students' attitudes towards interprofessional learning. *Medical Education Online, 18,* 1–10. https://doi.org/10.3402/meo.v18i0.21885

Lilienfeld, S. O. (2012). Public skepticism of psychology: Why many people perceive the study of human behavior as unscientific. *American Psychologist, 67*(2), 111–129. https://doi.org/10.1037/a0023963

Linden, W. (2015). From silos to bridges: Psychology on the move. *Canadian Psychology, 56*(10), 1–5. https://doi.org/10.1037/cap0000016

Machin, L. L., Bellis, K. M., Dixon, C., Morgan, H., Pye, J., Spencer, P., & Williams, R. A. (2018). Interprofessional education and practice guide: Designing ethics-orientated interprofessional education for health and social care students. *Journal of Interprofessional Care,* 1–11. https://doi.org/10.1080/13561820.2018.1538113

Mandy, A., Milton, C., & Mandy, P. (2004). Professional stereotyping and interprofessional education. *Learning in Health and Social Care, 3*(3), 154–170.

McFadyen, A. K., Webster, V. S., & Maclaren, W. M. (2006). The test-retest reliability of a revised version of the Readiness for Interprofessional Learning Scale (RIPLS). *Journal of Interprofessional Care, 20*(6), 633–639. https://doi.org/10.1080/13561820600991181

Mental Health Commission of Canada. (2017). *Options for improving access to counselling, psychotherapy and psychological services for mental health problems and illnesses*. Retrieved from https://www.mentalhealthcommission.ca/sites/default/files/2017-07/Options_for_improving_access_to_counselling_psychotherapy_and_psychological_services_eng.pdf

Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., … Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist, 56*(2), 128–165. https://doi.org/10.1037/0003-066X.56.2.128

Murdoch, D. D., Gregory, A., & Eggleton, J. M. (2015). Why psychology? An investigation of the training in psychological literacy in nursing, medicine, social work, counselling psychology, and clinical psychology. *Canadian Psychology, 50*(1), 136–146. https://doi.org/10.1037/a0038191

Oandasan, I., & Reeves, S. (2005). Key elements of interprofessional education. Part 1: The learner, the educator and the learning context. *Journal of Interprofessional Care, 1,* 321–338. https://doi.org/10.1080/13561820500083550

Oates, M., & Davidson, M. (2015). A critical appraisal of instruments to measure outcomes of interprofessional education. *Medical Education, 49*(4), 386–398. https://doi.org/10.1111/medu.12681

O'Carroll, V., McSwiggan, L., & Campbell, M. (2016). Health and social care professionals' attitudes to interprofessional working and interprofessional education: A literature review. *Journal of Interprofessional Care, 30*(1), 42–49. https://doi.org/10.3109/13561820.2015.1051614

Olson, R., & Bialocerkowski, A. (2014). Interprofessional education in allied health: A systematic review. *Medical Education in Review, 48*, 236–246. https://doi.org/10.1111/medu.12290

Paproski, D. A., & Haverkamp, B. E. (2000). Interdisciplinary collaboration: Ethical issues and recommendations. *Canadian Journal of Counselling, 34*(2), 85–97.

Parsell, G., & Bligh, J. (1999). The development of a questionnaire to assess the readiness of healthcare students for interprofessional learning (RIPLS). *Medical Education, 33*(2), 95–100.

Peachey, D., Hicks, V., & Adams, O. (2013). *An imperative for change: Access to psychological services for Canada.* Toronto, ON: Health Intelligence. Retrieved from https://cpa.ca/docs/File/Position/An_Imperative_for_Change.pdf

Reeves, S. (2016). Why we need interprofessional education to improve the delivery of safe and effective care. *Interface, 20*(56), 185–196. https://doi.org/10.1590/1807-57622014.0092

Reeves, S., Boet, S., Zierler, B., & Kitto, S. (2014). Interprofessional education and practice guide no. 3: Evaluating interprofessional education. *Journal of Interprofessional Care, 29*(4), 305–312. https://doi.org/10.3109/13561820.2014.1003637

Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: Effects on professional practice and healthcare outcomes (update). *Cochrane Database of Systematic Reviews, 3*(CD002213). https://doi.org/10.1002/14651858.CD002213.pub3

Riskiyana, R., Claramita, M., & Rahayu, G. R. (2018). Objectively measured interprofessional education outcome and factors that enhance program effectiveness: A systematic review. *Nurse Education Today, 66*, 73–78. https://doi.org/10.1016/j.nedt.2018.04.014

Rogers, G. R., Thistlethwaite, J. E., Anderson, E. S., Abrandt Dahlgren, M., Grymonpre, R. E., Moran, M., & Samarasekera, D. D. (2017). International consensus statement on the assessment of interprofessional learning outcomes. *Medical Teacher, 39*(4), 347–359. https://doi.org/10.1080/0142159X.2017.1270441

San Martin-Rodriguez, L., Beaulieu, M., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care, 19*(1), 132–147.

Stull, C. L., & Blue, C. M. (2016). Examining the influence of professional identity formation on the attitudes of students towards interprofessional collaboration. *Journal of Interprofessional Care*, *30*(1), 90–6. https://doi.org/10.3109/13561820.2015.1066318

Sunderland, A., & Findlay, L. C. (2013). *Perceived need for mental health care in Canada: Results from the 2012 Canadian Community Health Survey—Mental Health* (Report No. 82–003-X). Retrieved from https://www.mooddisorders.ca/sites/mooddisorders.ca/-files/downloads/mentalhealth_statcan11863-eng.pdf

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 1*(2), 149–178. https://doi.org/10.1002/ejsp.2420010202

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks Cole.

Thistlethwaite, J. (2015). An exploratory review of pre-qualification interprofessional education evaluations. *Journal of Interprofessional Care, 29*(4), 292–297. https://doi.org/10.3109/13561820.2014.985292

Tran, C., Kaila, P., & Salminen, H. (2018). Conditions for interprofessional education for students in primary healthcare: A qualitative study. *BMC Medical Education, 18,* 122–131. https://doi.org/10.1186/s12909-018-1245-8.

Vereen, L. G., Yates, C., Hudock, D., Hill, N. R., Jemmett, M., O'Donnell, J., & Knudson, S. (2018). The phenomena of collaborative practice: The impact of interprofessional education. *International Journal of Advanced Counselling, 40*, 427–442. https://doi.org/10.1007/s10447-018-9335-1

Votta-Bleeker, L., & Cohen, K. (2014). Matching need, supply and demand in psychology: How many to do what for whom? *Canadian Psychology, 55*(2), 131–134. https://doi.org/10.1037/a0036456

World Health Organization (WHO). (2001). *Mental health: New understanding, new hope.* Geneva, Switzerland: World Health Organization. Retrieved from https://www.who.int/whr/2001/en/

World Health Organization (WHO). (2010). *Framework for action on interprofessional education and collaborative practice*. Retrieved from https://www.who.int/hrh/resources/framework_action/en/

World Health Organization (WHO). (2012). *Topic 4: Being an effective team member.* Retrieved from https://www.who.int/patientsafety/education/curriculum/who_mc_topic-4.pdf

Young, R. A., & Lalande, V. (2011). Canadian counselling psychology: From defining moments to ways forward. *Canadian Psychology/Psychologie canadienne*, *52*(4), 248–255. https://doi.org/10.1037/a0025165

About the Authors

At the time of publication, Ellen Klaver is a doctoral student in counselling psychology at the University of Alberta. Her main interests are in research and clinical practice with eating disorders.

William Whelton is a professor of counselling psychology at the University of Alberta.

Gregory Harris is a professor in the Department of Counselling Psychology at Memorial University of Newfoundland.

Nicole Davis is a provisionally registered psychologist in Newfoundland and Labrador.

Elaine Greidanus is an assistant professor of counselling psychology at the University of Lethbridge.

We thank Don Sharpe of the psychology department at the University of Regina for his help and expertise in our statistical analysis.

Address correspondence to Ellen Klaver, University of Alberta, Department of Educational Psychology, Room 6-102 Education North, Edmonton, Alberta, Canada, T6G 2G5. E-mail: eklaver@ualberta.ca