INTERPROFESSIONAL EDUCATION OPPORTUNITIES AND ATTITUDES AMONG COUNSELLING PSYCHOLOGY STUDENTS AT THREE CANADIAN UNIVERSITIES

by

Nicole Kelly Davis

A Thesis submitted to the

School of Graduate Studies

in partial fulfillment of the requirements for the degree of

Masters of Education (Counselling Psychology)

Memorial University of Newfoundland

October, 2016

St. John's Newfoundland and Labrador

ABSTRACT

The purpose of this research was to explore and describe the perceptions and attitudes of graduate counselling students in three universities in Canada regarding interprofessional education (IPE) and collaboration. Understanding how counsellor training programs are preparing students to work collaboratively with other health care professionals was also explored.

The data for this study was collected using the Readiness for Interprofessional Learning Scale (RIPLS) that was created by Parsell and Bligh (1999) and adapted by McFadyen, Webster, Strachan, Figgins, Brown & McKechnie (2005). Demographic questions such as age, sex, educational institution attended, year of program, and previous IP experiences and work in an IP environment were also collected. Three additional questions, developed by the research team, which related to perceptions of IP collaboration, were also included in this survey. Sixty-five graduate students (Masters and Doctoral) in the field of counselling psychology participated in this study.

The results of this thesis indicated that counselling psychology students value IPE and collaboration. Counselling psychology students indicated that they believed that IPE and collaboration is beneficial to clients and is a crucial factor in delivering quality care. Another major finding indicated that students perceived that they had little opportunities during their graduate education to experience interdisciplinary collaboration. Implications for training and future research are discussed.

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the guidance and support of many individuals. First, I would like to extend my sincere gratitude to my supervising faculty member, Dr. Greg Harris, for all of the feedback, support and insight he provided throughout this process. Thank you, Greg, for answering all of my questions, providing me with a wealth of knowledge and advice, and most importantly, believing in my ability to complete this academic milestone.

I would like to thank Dr. Elaine Greidanus whose support, feedback, advice and knowledge in interprofessional collaboration and education made it possible for me to complete this study. Additionally, I would also like to thank Mr. Gerry White whose vast knowledge of statistical analysis also helped me throughout this study.

Finally, thank you to my husband, Greg, who provided me with encouragement and support throughout this entire process. You are my personal support system and every time I doubted myself, you made me believe I could do it.

Table of Contents

List of Tables

List of Figures

List of Appendices

Chapter 1: Introduction

1.1 Introduction to Interprofessional Education and Collaboration

The health care system and the way we deliver health care is always changing and evolving. Current research shows that clients/patients benefit from collaborative care such as interdisciplinary/interprofessional teamwork (Cubic, Mance, Turgesen, & Lamanna, 2012; Herbert, 2005; Ruddy, Borresen, Wood Johnson, & Gunn, 2008). The terms "interdisciplinary" and "interprofessional" imply shared learning, such as learning together to promote collaborative practice (Harris, 2006). The use of the words interprofessional and interdisciplinary will be used interchangeably throughout this thesis.

Interprofessional (IP) collaboration occurs in health care when health care providers (of different disciplines), clients, family members and communities work together to develop relationships that enable optimal health outcomes (Canadian Interprofessional Health Collaborative, 2010). Similarly, interprofessional education (IPE) occurs when students learn with, and from students from other health disciplines (World Health Organization, 2010). Arredondo, Shealy, Neal and Winfrey (2004) state the following regarding IP collaboration and education in professional psychology:

> "interprofessional collaboration refers to education, training, scholarship, practice, and other professional activities that prepare and call for psychologists to work: (a) in a respectful, collaborative, integrative, and informed manner with other psychologists and members of other disciplines and professions; and (b) with individuals, groups, systems, and organizations that may have diverse values, ethical perspectives, or worldviews, and accountability to different constituencies" (p.789).

In Canada, there is a national hub for interprofessional education and collaboration in healthcare practice and patient-centred care, known as the Canadian Interprofessional Health Collaborative (CIHC). The CIHC was developed because of the recognition that patients receive better care when health providers from various disciplines work together and learn from each other (CIHC, 2014). The CIHC (2009) have indicated that interprofessional education and collaboration is emerging as best practice and is considered necessary for the betterment of health care, both with regards to quality and health outcomes. The majority of the initiatives that focus on IP teamwork have been among mental health professionals such as nursing, social work and medicine. There is a notable gap in the research that includes interprofessional collaborative practice with counsellors and psychologists (Arthur & Russell-Mayhew, 2010).

From 2005-2008, the Centre for Collaborative Health Professional Education at Memorial University introduced an IPE curriculum framework in collaboration with the Faculty of Medicine, Faculty of Education, the three Schools of Nursing in Newfoundland and Labrador, the School of Social Work, the School of Pharmacy, and the University Counselling Centre (Sharpe & Curran, 2008). Although the University Counselling Centre was included in this initiative, the students that were included in the pre-licensure level IPE activities were students from Medicine, Nursing, Pharmacy and Social Work. Counselling psychology students, however, were not included in this initiative.

Interprofessional education is needed to prepare professionals to be equipped with the skills necessary to work in collaboration with professionals from different disciplines. The foundation of collaborative practice is established early in education, where counsellors can adopt appropriate attitudes, skills and knowledge toward this practice. Psychologists and counsellors alike must examine their own training programs to improve ways in which future

counsellors and psychologists will be prepared to provide services to their clients which are not only better, but also more accessible (Cubic et al., 2012). Arthur and Russell-Mayhew (2010) indicate that we need to support IPE and collaboration in counsellor education to facilitate the transition from students to professionals who have the skills essential to working collaboratively with other professionals.

1.2 Purpose

The primary focus of the current thesis was to explore interprofessional collaboration in the context of counselling psychology training. The purpose of this research was to explore and describe the perceptions and attitudes of graduate counselling students in three universities in Canada regarding interprofessional education and collaboration. Understanding how counsellor training programs are preparing students to work collaboratively with other health care professionals was also explored. Since counsellors and psychologists are often overlooked in research involving IPE and collaboration, this research will help close this gap in the literature. It will also discuss the benefits of including counsellors and psychologists in collaborative practice in health care. Additionally, knowledge gained from this study may help to inform future research on the need to include IPE in counsellor preparation curriculum. This in turn, could help better prepare graduate students for collaborative practice and to teach them the essential skills to be effective team members. Patient/client outcomes may be improved if pre-service counsellors are given the opportunity to strengthen their teamwork skills and gain first-hand experience of collaboration through IPE (Arthur & Russell-Mayhew, 2010; Herbert, 2005).

1.3 Research Questions

There were three main research questions that were addressed in this thesis. The first question was: Do counselling psychology students value interprofessional education and collaboration? The second research question was: What are counselling students' attitudes and perceptions of interprofessional education and collaboration? Lastly, the third research question asked how counselling students' attitudes of IPE and collaboration compare to other students' attitudes from different health care programs.

Chapter 2: Literature Review

2.1 Introduction

There is limited research available that addresses counselling psychology and interprofessional education and collaboration. This was discovered after searching through Ebsco publications, counselling and psychology journals and other counselling psychology literature. The literature that was available was quite dated, with the majority of the research having been conducted in the late 90's and early 2000's. The following literature review will therefore discuss interprofessional education and collaboration in relation to areas of professional psychology such as counsellors, psychologists (including counselling psychologists) and psychotherapists.

2.2 Interprofessional Collaboration and Education

Interprofessional Collaboration

The literature indicates that interprofessional (IP) collaboration is beneficial to patients, patient families, and health care providers (Herbert, 2005; Illingworth & Chelvanayagam, 2007; Tucker, Ferdinand, Mirsu-Paun, Herman, Delgado-Romero, van den Berg, & Jones, 2007). Handron, Diamond, and Zlotnik (2001) indicate that in many ways, health care consumers, families, professionals, educators, spiritual leaders and community members should be, or already are, being encouraged to work together to address the complex needs of patients, families, and all health care service users. This process of collaboration is based on the idea that when multiple health care providers and patients communicate with one another and take each other's perspectives into consideration, they will be better able to address the numerous factors that influence the health of individuals, families and communities (Sullivan, Kiovsky, Mason,

Hill, & Dukes, 2015). With the increase in a variation of diseases and social changes, health professionals have to provide the best care for patients who are facing complex problems. This increase of complex patient problems require the skills and knowledge of several professionals (Keshtkaran, Sharif & Rambod, 2014). Since it is difficult for one single health care provider to address complex patient needs and reach goals that will help their patients, professionals need to work together in collaborative practice (Hertweck, Hawkins, Bednarek, Goreczny, Schreiber & Sterrett; 2012; Keshtkaran et al., 2014).

Despite the literature supporting the benefits of IP collaboration, there is limited research on collaborative practices that include counsellors and psychologists. The same is true for counsellor education and the benefits of providing interprofessional education in graduate counselling programs. Similar to other health care providers, counsellors also work on health care teams and are involved in consulting, referring and seeking resources from other professionals. Counsellors may feel less overwhelmed with the complexity of client needs if they have access to a system of shared expertise; such as availing of service resources and consulting with other professionals (Arthur & Russell-Mayhew, 2010). This in turn, could also impact the nature of the care provided to the client. As the demand for collaboration increases and more professionals are seen working closely together to help their patients, it is essential that counsellors are prepared with competencies to participate in IP collaboration (Arredondo et al., 2004).

Interprofessional Education

Interprofessional education occurs "when students from two or more professions learn about, from and with each other, to enable effective collaboration and improve health outcomes" (World Health Organization, 2010, p.7). The World Health Organization (WHO, 2010) indicates

that when students understand how to work interprofessionally, they are prepared to enter the workplace as members of collaborative teams, and this is a key step in moving health systems from fragmentation to a position of strength. Over the course of an individual's education, most professionals are trained only in individual problem solving and decision-making, instead of using a collaborative, team-based approach to solving problems (WHO, 2010). In the United States, a report written by the Pew Health Professions Commission suggested that schools offering health care programs should provide 25% more of their clinical education in locations that offer or support IP collaboration (Bellack & O'Neil, 2000; O'Neil & the Pew Health Professions Commission, 1998). It was also indicated in the report that students should be provided with interdisciplinary teamwork opportunities, such as using case-based and problem-based learning experiences that provide opportunities for various health professionals to work together (Bellack & O'Neil, 2000; O'Neil & the Pew Health Professions Commission, 1998).

In Canada, collaborative care has been supported by Health Canada since the 1990's (Arthur & Russel-Mayhew, 2010). The Inter-professional Education for Collaborative Patient-Centred Practice (IECPCP) initiative, which is sponsored by Health Canada, is designed to facilitate and support the implementation of IPE across all health care fields. The initiative's goals are to ensure that health care providers have the competencies to work together through effective collaboration, which ultimately will contribute to improved patient satisfaction and improved patient outcomes (Herbert, 2005). One of the specific objectives of the initiative is to "increase the number of health professionals that are trained for patient-centered interprofessional team practice at the level of entry to practice, graduate education and continuing education" (Herbert, 2005, p. 2).

2.3 Interprofessional Education in Practice

When students participate in IPE, they not only practice to the full extent of their education and training, but they also learn how to develop effective interpersonal relationships through team collaboration, as well as share skills and knowledge with other individuals (Sullivan et al., 2015). The elements of this shared learning include "responsibility, accountability, coordination, communication, cooperation, assertiveness, autonomy, mutual trust, and respect" (Sullivan et al., 2015, p.48). Despite the benefits of IPE and for reasons unknown to researchers, there has been a reluctance to incorporate interprofessional education into counsellor and other nonmedical training programs (Johnson & Freeman, 2014). Because of this reluctance, students are not being fully prepared for the changing healthcare system, which is now including more collaborative practice and IP relationships (Johnson & Freeman, 2014). Therefore, a change in the curricula is needed, especially in the field of counselling psychology, to support the acquisition of competencies for IP collaboration (Arthur & Russell-Mayhew, 2010; Suter, Arndt, Arthur, Parboosing, Taylor & Deutschlander, 2009).

Handron et al. (2001) indicate that there are three components that can identify interdisciplinary education: 1) coursework that includes teamwork and collaborative practice, 2) students of different disciplines studying shared content together, and 3) different disciplines sharing field work or internships together. Unfortunately, they also indicate that these interdisciplinary courses have not been included in the core curricula of graduate studies and remain elective courses that few students decide to enroll in (Handron et. al., 2001). Gilbert (2005) argues that IPE elective courses can still provide good opportunities for students to learn from, and about students from other disciplines. A major issue, however, lies in the fact that extra funding and staffing are usually needed to offer this type of collaborative learning course

(Gilbert, 2005; Handron, et al., 2001). Thistlethwaite (2012) also indicates that a challenge in IPE is determining what forms of IPE are effective. For example, deciding when interprofessional learning should be offered, where it should occur (i.e., the classroom or clinical/practicum settings), how it is structured (i.e., team projects or teamwork simulations), to which professional disciplines it should be offered, by whom should it be delivered (i.e., supervisors or instructors) and what the rationale is for offering it.

There have been different approaches taken and different ideas suggested by researchers that would enhance counsellor education and update the curriculum to provide IPE, which would support collaboration in counselling programs. Greenberg and Bellack (1999) suggest that in order to foster interprofessional education, it first must be defined and conceptualized and then communicated throughout the institution. Once there is an understanding of this concept, they believe interdisciplinary practice should be required as part of the curriculum, instead of only being offered as part of elective courses. Additionally, motivating faculty to engage in interdisciplinary education could include building incentives into promotions, tenure and merit award criteria (Greenberg & Bellack, 1999).

Greenberg and Bellack (1999) also indicate that programs should capitalize on students' natural interest in working and learning with one another before they become too involved in their individual professional programs and become too focused on their individual roles. The literature is inconclusive on the appropriate time to introduce IPE to students (Ho, 2008). Gilbert (2005) indicates that when students are first entering their programs, they are very concerned about developing a clear sense of themselves within their disciplines. Expecting them to collaborate with other disciplines before they have gained an understanding of their own professional identity is counterproductive. While Greenberg and Bellack (1999) indicate the

concept of IPE should be introduced early to students who are enrolled in health or social science programs, Gilbert (2005) suggests the opposite. More specifically, Gilbert (2005) suggests that students should be immersed in collaborative practice in the year that they will graduate from their professional program. He indicates that by their graduation year, students have had experience with a number of complex clinical cases and are able to recognize the shortcomings of their profession in managing problems beyond their scope of practice. This provides them with self-knowledge and fosters a professional need to participate in IP problem solving activities (Gilbert, 2005).

Arthur and Russell-Mayhew (2010) indicate that in order for counsellors to work effectively with other professionals, they need to be educated on the value of IP collaboration as well as know the responsibilities and expertise that they would bring to a collaborative team. In counselling psychology, supervision is considered essential to professional training and is one of the most important activities within counsellor education (Bernard & Goodyear, 2009). Therefore, Arthur and Russell-Mayhew (2010) suggest that supervision practices during counsellor education can be used to help counsellors learn competencies about collaborative practice, such as learning with, and from, other professionals. Multiple benefits are thought to be associated with IP supervision, such as providing opportunities to see multiple perspectives and being exposed to a wider knowledge base. It has also been theorized that advantages such as increased creativity and critical thinking are associated with IP supervision (Bailey, 2004). Bailey (2004) also indicates that although in their program students may be exposed to IP learning, IP supervision has the potential to reinforce the transfer of collaborative learning by putting it to practice.

A major challenge, as described by Arthur and Russell-Mayhew (2010), is how well counsellors are being prepared for collaborative practice when curriculum does not include intentional opportunities to work with other disciplines. They state that in such cases, there seems to be a reliance on the practicum component of counsellor education to expose trainees to IP collaboration. Suggestions offered by Arthur and Russell-Mayhew (2010) on incorporating IPE into counsellor education include: 1) incorporating principles of IP collaboration in instruction of core courses, such as ethics, or other core course components, such as research seminars, 2) students of different disciplines being brought together during their practicum to learn strategies about specific interventions (e.g., CBT) or specific issues (e.g., eating disorders), which would highlight the expertise of specific disciplines but also show the advantages of collaborative practice, 3) practicum sites and classes could build an IP curriculum by having conversations about the daily IP experiences students and professionals encounter regularly, and 4) faculty and site supervisors should be provided with professional development opportunities so they can promote a better understanding to their students about the principles associated with IP collaboration. If students are going to be expected to be ready for collaborative practice once they enter the workforce, it seems logical and educationally necessary that interprofessional learning and collaboration should be included in health professional curricula, as well as determining the most effective ways to deliver IPE activities that promote collaboration (Thistlethwaite, 2012).

There are some educational institutions that put interprofessional education into daily practice by incorporating interprofessional collaboration in their programs and/or courses. For example, at the University of Newcastle in Australia, the Department of Rural Health provides placement support for undergraduate students attending their university and students attending a

nearby university. During these placements, students are given the opportunity to be taught using interprofessional learning models (ILM), where students can learn and work with other students on a monthly basis (Wakely, Brown, & Burrows, 2013). The ILM's were half day sessions that focused on areas of care that require involvement from a range of professional disciplines (such as diabetes, stroke, and trauma). Teams of interprofessional academics provide the ILM using lectures, group work and practical activities. An example of the ILM as described by Wakely et al. (2013) was giving students from different disciplines a hypothetical example of caring for complex trauma patients. Students worked together to manage patient care and were encouraged to discuss how their own profession would manage the patient. It was anticipated that by having students participate in IP collaboration, it would deepen the understanding of values and roles of other health professionals and improve their attitude towards interprofessional care (Wakely et al., 2013). Students' attitudes were assessed using the Readiness for Interprofessional Learning Scale before and after the ILM and a statistically significant improvement was found in students' attitudes (Wakely et al., 2013). Specifically, Wakely et al. (2013) found that there was a significant improvement in students' attitudes towards interprofessional education in three of the four domains of the RIPLS (i.e., teamwork and collaboration, negative professional identity and positive professional identity).

Similarly, in Canada, O'Neill and Wyness (2005) evaluated interprofessional components of an elective IPE course and found that practice and case-based experiences helped students understand concepts related to collaborative teamwork. It was discovered that the experiential component of the course, such as working alongside other students and receiving 'hands on' clinical experiences, was more meaningful than just learning the theory behind interprofessional education and collaboration. In addition, students strengthened their own professional identities

and gained more knowledge on other professions through the experiential components of the IPE course (O'Neill & Wyness, 2005). Not only did the students learn from, and with, each other but interacting with faculty from different disciplines and having a course taught by instructors of different professions helped students better understand interprofessional practice. Being engrossed in this collaborative environment increased the awareness of languages and cultures of other professions and helped prevent the development of interprofessional barriers (O'Neill & Wyness, 2005). More specifically, O'Neill and Wyness (2005) indicated practice-based interprofessional learning experiences deepened students' understanding of the roles of other professions, as well as helped students become aware of differences in thinking, sharing values and goals with other professionals, and appreciating diversity. Furthermore, students recognized that one sole profession cannot effectively respond to complex needs alone and that there is a tremendous benefit when professionals work collaboratively together.

2.4 Professional Psychology and IP Collaboration and Education in Primary Care

Interprofessional Collaboration

Primary care is usually the main point of entry for patients when entering into the health care system (Bray, Frank, McDaniel & Heldring, 2004). When an individual determines that a health problem exists, whether that problem is biological or psychosocial, they usually present their symptoms to a primary care physician or nurse (McDaniel, Belar, Schroeder, Hargrove, & Freeman, 2002). Primary care professionals are day-to-day health care providers (such as general practitioners or nurse practitioners) that deliver coordinated, comprehensive biopsychosocial care that is continuous over time (Institute of Medicine, 1996). McDaniel et al. (2002) indicate that because of these characteristics, it is important for psychologists to work in primary care as part of a health care team. Teamwork and collaboration is extremely important in health care and

since counsellors and psychologists play vital roles within health care, they too should be part of IP collaborations in primary care. The prevalence of mental health issues (such as depression and anxiety) and psychosocial issues in primary care is high (Bower, Knowles, Coventry & Rowland, 2011). Therefore, integrating mental health services into primary care provides easy access for patients who have problems stemming from these issues (Van Beek, Duchemin, Gersh, Pettigrew, Silva, & Luskin, 2008).

Van Beek et al. (2008) indicate that it is estimated that up to 70% of visits to primary care are because of psychosocial factors and 25% of patients have a diagnosable mental disorder. Cox, Adams and Loughran (2014) indicate that 75% of patients with depression visit doctors because of physical complaints. In addition, many patients who visit primary care settings have psychological problems that go undetected or are not appropriately treated by primary care physicians (Haley et al., 1994). Primary care psychology includes the prevention of diseases and promotes healthy behaviours in individuals, families and communities (Bray et al., 2004). Integrating counsellors and other mental health professionals into primary care is said to be promising for underserved populations (those who may not have access to mental health facilities such as counselling centers) as they will have increased access to mental health services in their community (Cox et al., 2014). Furthermore, increased access to mental health services might also promote healthy lifestyle changes and increase patients' quality of life (Cox et al., 2014). Bray et al. (2004) indicate that although psychologists do not have the training to provide medical intervention (such as taking blood pressure, treating colds, etc.), they are able to provide behavioural interventions that could prevent major health problems. Specifically, psychologists have developed effective behavioural interventions, such as weight management, lifestyle modification, and stress management which could aid in prevention of disease (Bray et

al., 2004). Given the nature of problems that exist in primary care, Spruill (1998) indicates that psychologists need to be an essential part of interprofessional primary health care teams.

The World Health Organization (2008) has outlined numerous reasons why the treatment of mental health and psychosocial issues should be integrated into primary care. Some of these reasons include: mental and physical health problems are interwoven and therefore integrated primary care will treat patients holistically; primary care for mental health enhances access as patients can access these services closer to home; and primary care for mental health is cost effective and more affordable for patients, communities and governments alike (WHO, 2008). Integrating mental health services into primary care is the most practical way to ensure that people get the mental health care they need and the key to doing this is supported, collaborative, shared cared (WHO, 2008). Therefore, it only seems logical that counsellors and/or psychologists should be trained and integrated into collaborating with primary care teams.

Bray et al. (2004) indicate that in the primary care setting, psychologists can provide important diagnostic and intervention services that can enhance patients' treatment options. Additionally, there are numerous advantages of psychologists collaborating in primary care because "primary care psychologists are experts in: (a) assessment and evaluation of common psychosocial symptoms, signs, and problems that are seen in primary care patients; (b) psychosocial management of acute and chronic health and illness conditions with which primary care patients often present; (c) collaboration with other primary care physicians (PCPs) and primary care teams; and (d) identifying appropriate experts for referral and collaboration" (Bray et al., 2004, p.8). Interestingly, one of the advantages to integrating psychologists in primary care as described by Bray et al. (2004) is psychologists' expert ability to collaborate with other team

members. This may be due to their long standing history of collaboration with physicians and other health care providers outside of the primary care setting (Bray et al., 2004).

Peachey, Hicks, and Adams (2013) indicate that in Canada, the delivery of mental health services is a silent crisis. One in five Canadians will experience a mental health issue in their lifetime (Canadian Mental Health Association, 2011) and the demands for mental health care is unmet (Peachey et al., 2013). There is a gap in the ability of patients to receive required care, even though there are benefits of psychological intervention (Peachey et al., 2013). There have been numerous initiatives taken in Canada to improve collaboration in primary care. For example, the Canadian Collaborative Mental Health Initiative (CCMHI) was developed in 2003 by 12 national organizations with the goal of strengthening and improving collaborative relationships among primary care professionals, mental health care providers, consumers, families and community organizations (Canadian Mental Health Association, 2015; Peachey et al., 2013). The 12 organizations that made up this initiative are the College of Family Physicians of Canada, Canadian Alliance on Mental Illness and Mental Health, Canadian Association of Occupational Therapists, Canadian Association of Social Workers, Canadian Federation of Mental Health Nurses, Canadian Mental Health Association, Canadian Nurses Association, Canadian Pharmacists Association, Canadian Psychiatric Association, Canadian Psychological Association, Dietitians of Canada, and Registered Psychiatric Nurses of Canada.

The Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP) was formed in 2004 by 11 national organizations and focused on creating optimal conditions that allow Canadian health care providers to work together in the most efficient and effective ways to produce better outcomes for their patients and clients (Nolte, 2005). The organizations involved in this collaboration were the Canadian Psychological Association, Canadian Association of

Occupational Therapists, Canadian Association of Social Workers, Canadian Association of Speech-Language Pathologists and Audiologists, Canadian Coalition of Enhancing Preventative Practices of Health Professionals, Canadian Medical Association, Canadian Nurses Association, Canadian Pharmacists Association, Canadian Physiotherapy Association, College of Family Physicians of Canada, and Dietitians of Canada.

The Mental Health Table Access Forum was formed in 2009 by 12 regulated health care organizations. The purpose of this forum was to create a venue for members to share, network and explore issues that involve advancing mental health promotion and front line mental health delivery in Canada. The organizations that were involved in the Forum were the Canadian Association of Occupational Therapists, Canadian Association of Social Workers, Canadian Pharmacists Association, Canadian Association of Speech-Language Pathologists and Audiologists, Canadian Medical Association, Canadian Nurses Association, Canadian Physiotherapy Association, Canadian Psychiatric Association, Canadian Psychological Association, Canadian Federation of Mental Health Nurses, Registered Psychiatric Nurses of Canada, and the College of Family Physicians of Canada. One of the recommendations provided by forum members was the importance of providing funding to services and providers that are insufficiently funded and inaccessible to many Canadians, such as psychologists (Cohen & Lemire, 2010).

In 2010-2011, a three phase research project referred to as Integrating Needs for Mental Wellbeing into Human Resource Planning (Project IN4M) was funded by Health Canada and the Mental Health Commission. This project's goal was to improve the availability and accessibility of accessing high quality mental health services through needs-based predictive modelling of health, social, education, criminal justice and private sector human resources (Canadian Mental

Health Association, 2011). It is evident from all of the aforementioned initiatives that integrating mental health into primary care is valuable and is also the best way for individuals to receive proper mental health care. Therefore, when psychologists are integrated into primary care and can provide treatment of mental disorders, this provides better options to patients than isolated pharmacological treatment (Peachey et al., 2013).

It is important to note that the majority of the literature that discusses professional psychology collaborating in primary care refers to psychologists and not counsellors. However, there have been some studies that have also shown the benefits of integrating counsellors into primary care settings. For instance, Grand Valley Health Plan (GVHP) in Michigan formed an interdisciplinary task group to redesign counselling and wellness services in primary care to combat the high rates of mental health hospitalization in their health center. Their goal was to integrate counselling and wellness services into the group practice that targets high risk patients and effectively expands the number of patients receiving services (Van Beek et al., 2008). Integrating counselling and wellness services had a substantial impact such as more patients being seen, improved access and quality of care, improvements in all measures relating to mental health hospitalization, more patients being treated at the primary care level which resulted in fewer referrals to behavioural health specialists, and GVHP's mental health hospitalization rate decreased by 54% since 2002 (Van Beek et al., 2008).

Similar findings to Van Beek et al.'s study were found by Kates et al. (2002) in Southern Ontario, Canada. They found that when counsellors and psychiatrists were brought into primary care offices, over 70% of individuals who were seen showed significant improvement in outcomes. By effectively integrating counsellors within primary care settings, there was an increase in the capacity of primary care to handle mental health issues, which also strengthened

links from different health care providers and provided a significant increase in access to mental health services (Kates et al., 2002). When counsellors are available to collaborate with physicians in primary care, Kates et al. (2002) also found that family physicians' skills and comfort levels increased when managing their patients' mental health problems. Kates et al. (2002) also indicate that other studies as well have found benefits of having counsellors collaborating in primary care such as improved communication with family physicians, using resources more efficiently, and reduced stigma around mental health problems (Radley, Cramer & Kennedy, 1997; Wyld, 1981).

Interprofessional Education

Interprofessional education is a key factor in integrating professional psychology into primary care. Cubic et al. (2012) indicate that in order to better help patients, the future psychology workforce needs to be provided with opportunities for training in integrated care. Many researchers in this area indicate that psychologists and counsellors must receive formal training in primary care settings, as well as interdisciplinary collaboration training, such as learning about their roles as members of interprofessional teams (Bray et al., 2004; Eatock, 2006; Heath et al., 2008; McDaniel et al., 2002; Spruill, 1998). To adequately train counsellors to work in the primary care field, IPE must be brought into the curriculum (Cox et al., 2012), otherwise individuals will have to rely on post-licensure interprofessional training (Heath et al., 2008). Cox et al. (2014) reports that doctorate level counselling psychology students who were enrolled in an IPE course that had 3 components – a didactic portion, a shadowing experience and a series of practice intervention assignments – stated in their course evaluations that they had a greater understanding of their role on a health care team and developed a deeper appreciation of the biopsychosocial model of health compared to before the course started. Consequently, students

who continued their pre-doctoral internships in primary care indicated that the interprofessional learning course prepared them to work as a member of an interdisciplinary healthcare team (Cox et al., 2014). By understanding their own profession and the professional worldview of medical providers with whom they work, mental health practitioners, such as counsellors, are able to be more effective consultants (Garcia-Shelton & Vogel, 2002). Additionally, in primary care psychology training, not only do students need to gain skills in interdisciplinary collaboration, but they also need to develop skills that help them understand their identity as psychologists (Hargrove, 1982; McDaniel et al., 2002). McDaniel et al. (2002) indicates that psychologists who have a positive professional identity are more likely to be able to work collaboratively in primary care.

2.5 Benefits of IP Collaboration and Education

Interprofessional Collaboration

It is evident from the literature that IP collaboration is beneficial to both clients/patients and professionals. Easier patient access to resources, optimal client care, staff satisfaction, workforce utilization and funding are just some examples of the benefits of IP collaboration (Herbert, 2005). Arthur and Russell-Mayhew (2010) indicate that collaboration among different disciplines is beneficial to address the complexity of client issues and provides multilayered care. In addition, duplication of resources and services can be avoided when there is collaboration between service agencies. Arthur and Russell-Mayhew (2010) also suggest that clients and counsellors benefit when counsellors have access to consultations with health care professionals, can make referrals, and can take advantage of service resources. As previously mentioned, when counsellors work collaboratively with other professionals, they may feel less overwhelmed with the complex needs of their clients because they can avail of a system of shared resources; such as

sharing staff, time, monetary resources, equipment and capabilities of other professionals (Cefola, Brotsky, & Hanson, 2010). Cefola et al. (2010) indicate that many corporate executives implement sharing of resources because of the benefits they receive from it. For example, in a survey of corporate executives in the private sector, the majority of executives indicated that the benefits received from sharing resources and services included reduced costs, performance improvement, increased productivity, better functional technology, and increased collaboration and teamwork (Cefola et al., 2010).

Tucker et al. (2007) indicate that there are numerous benefits when counselling psychologists work as team members in health care settings. For example, since counselling psychologists are trained communicators and facilitators, they can provide other health care professionals with training to improve their communication skills, as well as their sensitivity and competency when working with people from other cultures. When counselling psychologists work with other health care providers, they can also train them in patient-centered communication (Tucker et al., 2007). More specifically, Tucker et al. (2007) indicate that it can be beneficial when counselling psychologists train physicians and other health care providers in the area of interviewing skills. That is, they can teach them to focus on the feelings, ideas, expectations, values, and health and illness conceptualizations of their patient, which can promote communicating warmth, empathy and understanding (Tucker et al., 2007). This would in turn, promote a positive patient-provider relationship and enhance the patient's health care experience.

Ruddy et al. (2008) lists numerous reasons why psychotherapists should build collaborative relationships with medical professionals. One reason being that patients are often pleased and reassured that there is open communication between all members of their health care

team. When IP collaborative relationships are established with other medical professionals, psychotherapists can discuss how to maintain the safety of the patient's confidential information and share this information with their patients as well. In addition, medical professionals may not be aware of their patient's emotional and/or psychiatric issues. When psychotherapists and other mental health providers share this information with physicians, the medical professionals are able to provide more optimal care (Ruddy et al., 2008). Integrated collaborative health care is dependent upon the psychotherapist and medical professionals viewing their patients as a 'whole'. Working together and recognizing that patients' physical health may be affecting their emotional functioning and vice versa can help provide the best possible care to patients.

Interprofessional Education

Just as there are benefits of working with other disciplines in the workforce, there are also benefits of learning to collaborate with other professionals during education, as this will prepare students to work collaboratively in the field. To do this, Arthur and Russell-Mayhew (2010) suggest that we need to bridge the gap between education of health care and the reality of professional practice as members of collaborative teams. They indicate that supporting the knowledge and skills essential to working in collaborative teams with other professionals will facilitate the transition from student to professional. As indicated by O'Neill and Wyness (2005) students who worked in collaborative teams in an IPE course learned how to function more effectively as team members, which will translate to essential teamwork skills when delivering health care during employment. Students indicated that learning through IPE and experiencing practice-based learning was not only beneficial but was the most-effective way to learn (O'Neill & Wyness, 2005).

Bridges, Davidson, Odegard, Maki and Tomkowiak (2011) indicate that understanding your own role, and others' professions, in health care is critical in IPE. Consequently, in a study by Church, Robinson and Goodwin (2009), students indicated that one of the benefits that they perceived regarding IPE was what they had learned about themselves and other disciplines. More specifically, students indicated that during the IPE experience they gained knowledge about their own practice from other professions, gained greater insight into their own discipline, and developed a better understanding of other professions (Church et al., 2009). Church et al. (2009) also found that students indicated that the IPE experience also helped them develop essential skills, such as how to interact and communicate with other disciplines and how to work as a part of an interdisciplinary team. Students perceived that the IPE experience helped them understand the advantages to interprofessional collaboration and how it can positively impact care, especially when addressing complex issues (Church et al., 2009).

Freeth et al. (1998, as cited in Illingworth & Chelvanayagam, 2007) indicate that further benefits of IPE include a decline in the number of communication breakdowns, an increase in morale and efficiency, and an avoidance of 'unhelpful protectionism'. Illingworth and Chelvanayagam (2007) indicate that 'unhelpful protectionism' is an issue that has been raised frequently by user and patient groups. They indicate that during education, health professionals can develop a narrow perspective, since they generally only follow their own discipline in prequalification education. A narrow perspective can develop because it is only after several years of training that health professionals work with other professional groups (Illingworth & Chelvanayagam, 2007). Therefore, to prevent these situations, IPE offers students the opportunities to work with other disciplines in their education which will enhance personal and professional confidence, encourage mutual understanding of different professions, aid in intra-

and interprofessional communication and encourage reflective practice (Barr, 2000, as cited in Illingworth & Chelvanayagam, 2007).

2.6 Challenges to IPE and Collaboration

Although there are many benefits to IPE and collaboration, it is not without its challenges. Arthur and Russell-Mayhew (2010) indicate that a large barrier of IPE is overcoming the socialization of professions in specific academic disciplines. Hierarchies of power, 'turf' protection and battles about professional boundaries, such as which professions have claims to certain practices, are prevalent in many health care settings (Ho, 2008; Oandasan & Scott Reeves, 2005; Tucker et al., 2007). Territorial issues are also sometimes raised by health care providers who do not believe that counselling psychologists belong in health care settings (Tucker et al., 2007). Some historical views of medical degrees being superior to other degrees can also create conflict (Tucker et al., 2007) and power struggles are created about professional knowledge and who is responsible for decision-making when professional roles are blurred (Arthur & Russell-Mayhew, 2010). Other studies have indicated that respect may be hindered because of the lack of understanding of the roles that each member brings to the team and may not be due to power struggles and competition (Engel & Prentice, 2013). Engel and Prentice (2013) suggest that this issue could be addressed during the education process.

Ruddy et al. (2008) note that many of the differences that are experienced in the mental health and health care system come from the fact that psychotherapists and other health care providers train and practice separately. Many mental health programs in counselling psychology train in universities and colleges and there is not usually an overlap with medical or nursing schools. Similarly, health care professionals also have limited educational exposure to the field of counselling psychology (Ruddy et al., 2008). The lack of shared classroom experiences

between different mental health disciplines prevent them from developing a common theoretical basis for practice (Handron et al., 2001). Arthur and Russell-Mayhew (2010) suggest that in order to overcome some of the cultural barriers that exist in sharing power in educational programs and in the workplace, a transformation of curriculum of health care programs, and modelling of interprofessional practice should occur. Handron et al. (2001) suggest that cross-teaching may be enlightening to health care providers, such as having a marriage and family therapist teach a course on therapy to psychiatry residents. However, although this may be beneficial, the limited exposure may only provide an appreciation of each other's roles and not a full understanding of interprofessional collaboration.

Although some IPE courses have been successful (O'Neill & Wyness, 2005; Wakely et. al., 2013) several challenges emerge when fostering interdisciplinary collaborative education into classrooms. Handron et al. (2001) indicate that in the classroom, competitive behaviours of students and faculty members can negatively impact collaborative processes. Educational system constraints and financial expenses also play a factor in incorporating IPE into curricula (Gilbert, 2005; Handron et al., 2001). Gilbert (2005) indicates that when budgets are constrained, the focus of the curriculum becomes disciplinary; funding for anything outside of a disciplinary approach is usually reduced or cut. Additionally, constrains between departments in universities prevent the ability to schedule courses that include interdisciplinary participants (Handron et al., 2001). In some programs, school curriculum and schedules prevent students and faculty from participating in interdisciplinary education (Handron et al., 2001; Ho, 2008). Discrepancies in numbers of students and faculty in different disciplines, different learning and assessment styles, and different curricular periods also contribute to challenges of implementing IPE courses (Ho, 2008). Additionally, there can be quite a large expense of having multiple faculty members

cover one course and fair distribution of workload can also become an obstacle (Gilbert, 2005; Handron et al., 2001). Gilbert (2005) also indicates that the large amount of time and high costs that is associated with developing and delivering an IPE curriculum contributes to barriers of implementation as well.

Determining whose code of ethics to follow during interprofessional collaboration can also be considered a challenge. Engel and Prentice (2013) indicate that the purpose of interprofessional collaboration is to promote and enhance the well-being of the patient. However, although there is a wealth of literature on IPE and collaboration, little research is available on the ethical considerations of IPE and collaborative teamwork. Conflicts over differences of goals and ethical norms may leave team members with the assumption that they have to give up on their beliefs, which could result in moral distress (Engel & Prentice, 2013). Arthur and Russell-Mayhew (2010) address this by suggesting that "taking a transdisciplinary approach to standard of practice can then be used to inform the code of ethics for specific disciplines while maintaining a shared purpose. The idea here is not to eliminate separate codes of ethics, but rather to strengthen them through incorporating content that addresses professional responsibilities for ethical practices in interprofessional collaboration" (p.264).

2.7 Attitudes and Perceptions of IPE using the Readiness for Interprofessional Learning Scale

Attitudes and perceptions of IPE can either enhance or impede the efficiency of collaborative practice. This has been noted as the biggest factor in preventing or facilitating the implementation of IPE (Parsell & Bleigh, 1999). To determine an individual's attitude toward IPE and collaboration, reporting scales such as the Readiness for Interprofessional Learning Scale (RIPLS) are often used (Williams, Brown & Boyle, 2012). Since the most difficult barrier

of IPE is attitudes and perceptions, Parsell and Bleigh (1999) created the RIPLS questionnaire to investigate the attitudinal constructs of an individual's readiness to participate in IPE. The RIPLS was validated in undergraduate students in eight health care professions and has been used for graduate students, undergraduate students and practicing professionals (Aziz et al., 2011; Hertweck et al., 2012; Keshtkaran et al., 2014; Mahler, Rochon, Karstens, Szecsenyi & Hermann, 2014). Additionally, Keshtkaran et al. (2014) report that the Cronbach's alpha coefficients of RIPLS have been reported as 0.62-0.87 in some studies which suggest it has high reliability. Parsell and Bleigh (1999) have indicated that generally, when attitudes are positive towards other professionals and working together, IPE programs are more likely to be successful. This is why exploring the attitudes of IPE by using the RIPLS could be beneficial to developing and implementing IPE programs.

The RIPLS has been administered to health care students from numerous professions, such as medicine, nursing, occupational therapy, pharmacy and more (Aziz et al., 2011; Keshtkaran et al., 2014; McFadyen et al., 2005; Parsell & Bleigh, 1999; Williams et al., 2013). King et al. (2011) indicate that although studies have found that generally, students in health science programs have attitudes that support IPE, they also indicate there is a difference in the degree to which varying disciplines support IPE programs and courses. Since counselling psychology is considered part of health care, it is also important to explore the attitudes and perceptions of IPE using the RIPLS with counselling psychology students. Counselling psychology is often overlooked as there is limited research available on counselling and IPE, despite the fact that counsellors and psychologists also work collaboratively with other professionals.

As previously mentioned, the RIPLS has been administered to many different health care professions to determine their attitudes of IPE. Many of these studies focus on the attitudes and perceptions of medical students and nursing students (Judge, Polifroni, Maruca, Hobson, Leschak & Zakewicz, 2015; Hertweck et al., 2012; Keshtkaran et al., 2014). However, in a study conducted by Hertweck et al. (2012), physician assistant students were evaluated for readiness for IPE and compared to other health care students' readiness, including students from a counselling psychology program. Although the difference was not significant, they found that counselling students had higher total RIPLS scores than the physician assistant students. The physician assistant students scored significantly lower on three subscales of the RIPLS (i.e., Roles and Responsibilities, Negative Professional Identity, and Teamwork and Collaboration) and the total RIPLS score in comparison to students from Occupational Therapy, Physical Therapy and Counselling Psychology (Hertweck et al., 2012). Other research has also found that students in the field of medicine have had significantly lower scores of readiness compared with other health care professionals (Aziz et al., 2011; Keshkaran et al., 2014).

Williams et al. (2013) administered the RIPLS to 775 students completing either a single paramedic degree or a double nursing/paramedic degree from 5 different universities in Australia. They found that overall, students strongly identified with the idea that team work skills were important for all students in order for small group learning to work and students must have respect and trust for one another. The paramedic students also disagreed that the main function of allied health professionals was to solely provide support to doctors (Williams et al., 2013). Similar to this current thesis design, Williams et al.'s (2013) participants came from more than one university. Because of this, each university had students that showed different levels of

preparedness for interprofessional learning. However, the majority of paramedic students still indicated that they valued the concepts of teamwork, communication and respect.

Since there is limited research available on the use of RIPLS with counselling psychology students, it will be difficult to determine if this study's findings of attitudes and perceptions towards IPE and readiness for IPE compare with other counselling psychology students beyond the scope of this project. Therefore, the current findings will be reviewed to see how counselling students' attitudes and values of IPE relate to students in other health care programs, such as physician assistant, occupational therapy, paramedic, medicine and nursing.

2.8 Conclusion

As discussed, the literature supports the idea that clients/patients benefit from collaborative care such as interprofessional teamwork. To prepare professionals with the skills necessary to work collaboratively with other professionals, interprofessional education should be included in health professional curricula. Although there are some professional programs that provide their students with interprofessional opportunities, counselling psychology programs seem to be overlooked. In addition, there is limited research available that address interprofessional education and collaboration with counsellors and psychologists, despite the fact that counsellors and psychologists also work on health care teams and consult with other professionals.

This literature review provided an overview of interprofessional collaboration and education by defining these concepts, describing what it means to experience IPE and collaboration in practice, discussing how professional psychology can contribute to collaborative practice in primary care, examining both the benefits of IPE and collaboration, as well the

challenges to implementing it and discussing the importance of students' attitudes and perceptions of IPE and collaboration. With this information presented, the methodology of the current study will be discussed in the next chapter.

Chapter 3: Methodology

3.1 Purpose

The primary purpose of this study was to explore and describe the attitudes and perceptions of graduate counselling students at three Canadian universities regarding interprofessional education and collaboration. Understanding how counsellor training programs are preparing students to work collaboratively with other health care professionals was also a major focus. As previously discussed, interprofessional education consists of students from two or more professions working together to learn about, from and with, each other to improve patient outcomes (World Health Organization, 2010).

3.2 Hypotheses

1. Counselling psychology students will value and have positive attitudes towards interdisciplinary practice. That is, they will score high on three of the RIPLS subscales (i.e., teamwork and collaboration, positive professional identity and roles and responsibilities) and low on one subscale (i.e., negative professional identity).

2. It is also hypothesized that Canadian counselling psychology students will indicate very few opportunities for interprofessional education in their programs.

3. Counselling psychology students and students from different health care programs will have similar attitudes towards IPE and collaboration.

3.3 Method

Population and Sample. The population of interest for this research project was Canadian graduate (Master's and Doctoral) students in the field of counselling psychology. A

convenience study sample was derived from students enrolled in Counselling Psychology programs at three different universities in Canada. Two of the universities were in Western Canada and one university was in Atlantic Canada. The counselling psychology programs were similar in nature at the three universities as they all provided training to develop professional skills in counselling psychology. One of the programs offered masters and doctoral level training and two programs exclusively offered masters level training. Counselling psychology students were chosen because of the notable gap in the research on IPE and collaboration with counsellors and psychologists. Additionally, these three schools were chosen based on the researcher's collaboration with faculty from these schools and the availability of counselling programs in these institutions. Criteria for eligibility included students being enrolled in a counselling psychology masters or doctorate program during the data collection timeframe. As well, all participants were adults that were able to read and understand English. This study was open to all genders, races, ethnicities and backgrounds.

Measure: Readiness for Interprofessional Learning Scale. The RIPLS (McFadyen et al., 2005; Parsell & Bligh, 1999) was chosen because of its ability to assess students' attitudes and readiness for learning with other disciplines. This survey has been used to examine educational outcomes by exploring the attitudes, beliefs, knowledge and skills that students have towards interprofessional learning and education (King et al., 2011). Although the original survey by Parsell and Bligh (1999) contained three subscales, this current study used the model proposed by McFadyen et al. (2005) which uses four subscales.

The RIPLS consists of 19 items that ask participants to rate how strongly they agree or disagree with statements regarding shared learning with other health care professionals. The

scale is rated from 1 (indicating the student strongly disagrees) to 5 (indicating the student strongly agrees). The four subscales as described by McFadyen et al. (2005) are as follows:

1) Teamwork and Collaboration – this subscale includes items 1-9 and indicates the importance of health care professionals collaborating to provide optimal patient care. The items in this subscale evaluate students' attitudes towards the importance of health care students collaborating with each other before clinical practice so they can develop positive relationships, trust and respect for each other, and share knowledge and skills (Hertweck et al., 2012; King et al., 2011). Scores on this subscale range between 9-45 and a high score implies that students agree with item content regarding the importance of these qualities.
2) Negative Professional Identity – this subscale includes items 10-12 and consists of negative statements relating to the value of working with, and learning from, other health care students. Scores range from 3 to 15 and a high score suggests that students do not think it is important to participate in collaborative learning with other health care students (Hertweck et al., 2012).
3) Positive Professional Identity – this subscale includes items 13-16 and consists of positive statements regarding the benefits of having shared learning experiences with other health care students, such as improving communication, teamwork skills and abilities, and problem-solving skills (Hertweck et al., 2012). Scores on this subtest range from 4 to 20 and a high score indicates that students value shared learning with other health care students.
4) Roles and Responsibilities – the final subscale of the RIPLS includes items 17-19 and consists of items that question students' own professional role, as well as the role of other

health care professionals. Scores on this subtest range from 3 to 15 and a high score suggests that students have an unclear perception of their professional role and the roles of other professionals (Hertweck et al., 2012; King et al., 2011).

Additional Survey Questions. Eight demographic questions were included in the survey; the first six of these questions included: age, sex, educational institution, graduate-level program, year of program and whether the students were registered in any professional associations (e.g., Registered Psychologist). The last two questions included previous interprofessional experience and whether the participants had ever worked in an interprofessional environment. There were also three additional questions developed by the research project's team that were included in the survey. Two were multiple choice questions that related to students perceptions of interdisciplinary teamwork and their role of interdisciplinary teamwork as a counsellor. One was an open-ended question that asked students for their take away messages regarding interdisciplinary practice.

Participants. A total of 65 students from the above noted universities participated in this study. Students were either Master's students or doctorate students studying counselling psychology. Study recruitment occurred on all three campuses and administrators of each counselling psychology program sent an invitation email to all students to invite them to take part in this study. To protect participants' confidentiality, an email listserv of counselling students (i.e., that does not show students' emails) was used by program administrators.

3.4 Procedure

Data Collection. Data collection for this project started March 2015 and ended June 2015. Students who accepted the invitation email from program administrators were brought to

FluidSurveys.com where they were able to read an information letter/consent form on the project. By submitting the information letter and consent form, students consented to participate in the survey. Participants were advised that all participation was voluntary and that they had the right to withdraw from the survey at any time prior to the survey being submitted. Additionally, students were informed that all survey responses were completely anonymous and no identifying information would be linked to their survey. Since this research project was a collaborative effort between three universities, ethical approval was granted by all three institution's research ethics boards. The author of this thesis was responsible for obtaining ethical approval from Memorial University. Although this research project was a collaborative effort between researchers at three universities, the author of this thesis took on the primary/lead role of analyzing the dataset for this current research; this data was a subset of a larger data set. All data was stored on a secure password-protected computer.

Data Analysis. Data was analyzed using the statistical software, Statistical Package for Social Sciences (SPSS) version 23. The data was collected in FluidSurveys and then transferred into an SPSS data file and double checked to ensure the data was accurately transferred. At the preliminary stage of analysis, the author looked at reliability indices through cronbach's alpha analyses for each of the subscales. Following reliability analyses, means and standard deviations were created and spearman rho correlations were also used to answer this study's research questions.

There was one open-ended question in the survey that asked students to provide the take away messages that they have perceived about interdisciplinary practices during their training. To analyze this question, the data was typed out verbatim into a Microsoft document and commonalities were examined to determine themes in the data.

Chapter 4: Results

As previously discussed, 65 counselling psychology students completed the Readiness for Interprofessional Learning Scale questionnaire. Data was analyzed through descriptive and correlational techniques using SPSS. This chapter presents the findings from the current study, which include students' perceptions and attitudes of interprofessional education, a simple mean comparison of counselling students' attitudes/perception of IPE with other health care professionals, and the relationship among the RIPLS subscales. General demographic information is also described in this section.

4.1 Demographics

Demographic data was collected and used for descriptive purposes. This data provided meaningful background information on respondents. The demographic table below (see Table 1) shows the summary of this study's demographic findings. The sample was primarily female (81.5%, n=53) with well over half of the sample enrolled in a Master's program (83.1%, n=54). The age of respondents was variable, with the majority falling between the 23-26 range (21.5%, n=14) and the 27-30 range (21.5%, n=14). Close to thirty-four percent (33.8%) of students indicated that they were enrolled in the second year of their program (n=22), while 30.8% and 23.1% indicated that they were enrolled in years 1 and 3, respectively (n=20, n=15). Additionally, there were three students who indicated that they were graduated from their program and not working as a counsellor (4.6%) and another three students who indicated that they were graduated and working as counsellors (4.6%). Over half of the participants had previous interprofessional experience (78.5%, n=51) and over half indicated that they have worked in an interprofessional environment (67.7%, n=44).

Table 1. Demographic Characteristics of the Sample

Characteristics	Number	Percent of Sample
Age		
23-26	14	21.5
27-30	14	21.5
31-35	16	24.6
36-40	10	15.4
40+	9	13.8
Missing	2	3.1
Sex		
Male	10	15.4
Female	53	81.5
Missing	2	3.1
Graduate Level		
Master's	54	83.1
Doctoral	10	15.4
Post-Doctoral	0	0
Missing	1	1.5
Year of Program		
1	20	30.8
2	22	33.8
3	15	23.1
Graduated(not working as counsellor)	3	4.6
Graduated (working as counsellor)	3	4.6
Missing	2	3.1
Registration		
Cert. Canadian Counsellor	2	3.1
Provisional Psychologist	1	1.5
Registered Psychologist	2	3.1
Registered Social Worker	4	6.2
Other	3	4.6
N/A	45	69.2
Missing	8	12.3
Previous IPE Experience		
Yes	51	78.5
No	13	20
Missing	1	1.5
Worked in IPE Environment		
Yes	44	67.7
No	20	30.8
Missing	1	1.5

4.2 Students' Attitudes and Perceptions of IPE

To answer the first research question ("Do counselling psychology students value interprofessional education and collaboration?) the means and standard deviations of each subscale were computed (see Table 2). Reliability analysis was conducted to ensure the reliability of each subscale. However, one of the subscales (Roles and Responsibilities) had an unacceptably low reliability (.27) and therefore was omitted from the study. Table 2 shows the means, standard deviations and reliability statistics for the remaining subscales.

Table 2. Reliability Analysis (Cronbach's alpha) and Mean and Standard Deviations

RIPLS Subscale	Mean (SD)	Cronbach's alpha	Number of items
Teamwork & Collaboration	40.5 (3.9)	0.85	1-9
Negative Professional Identity	4.68 (1.8)	0.76	10-12
Positive Professional Identity	17.2 (2.7)	0.88	13-16

* Note: Cronbach's alpha for negative professional identity included items that were not reverse scored to reflect the actual negative construct.

As previously indicated, when answering questions from the RIPLS questionnaire, students were asked to specify their level of agreement or disagreement on a symmetric agree-disagree scale. One indicated "strongly disagree" while five indicated "strongly agree". Figures 1, 2 and 3 show the mean responses for each subscale. For the questions in the Teamwork and Collaboration subscale (questions 1-9) the average response was 4.50. The average response for the questions in the Negative Professional Identity subscale (questions 10-12) was 1.56. For the questions in the Positive Professional Identity subscale (questions 13-16) the average response was 4.30.

Figure 1. Mean of Teamwork and Collaboration Subscale Responses.

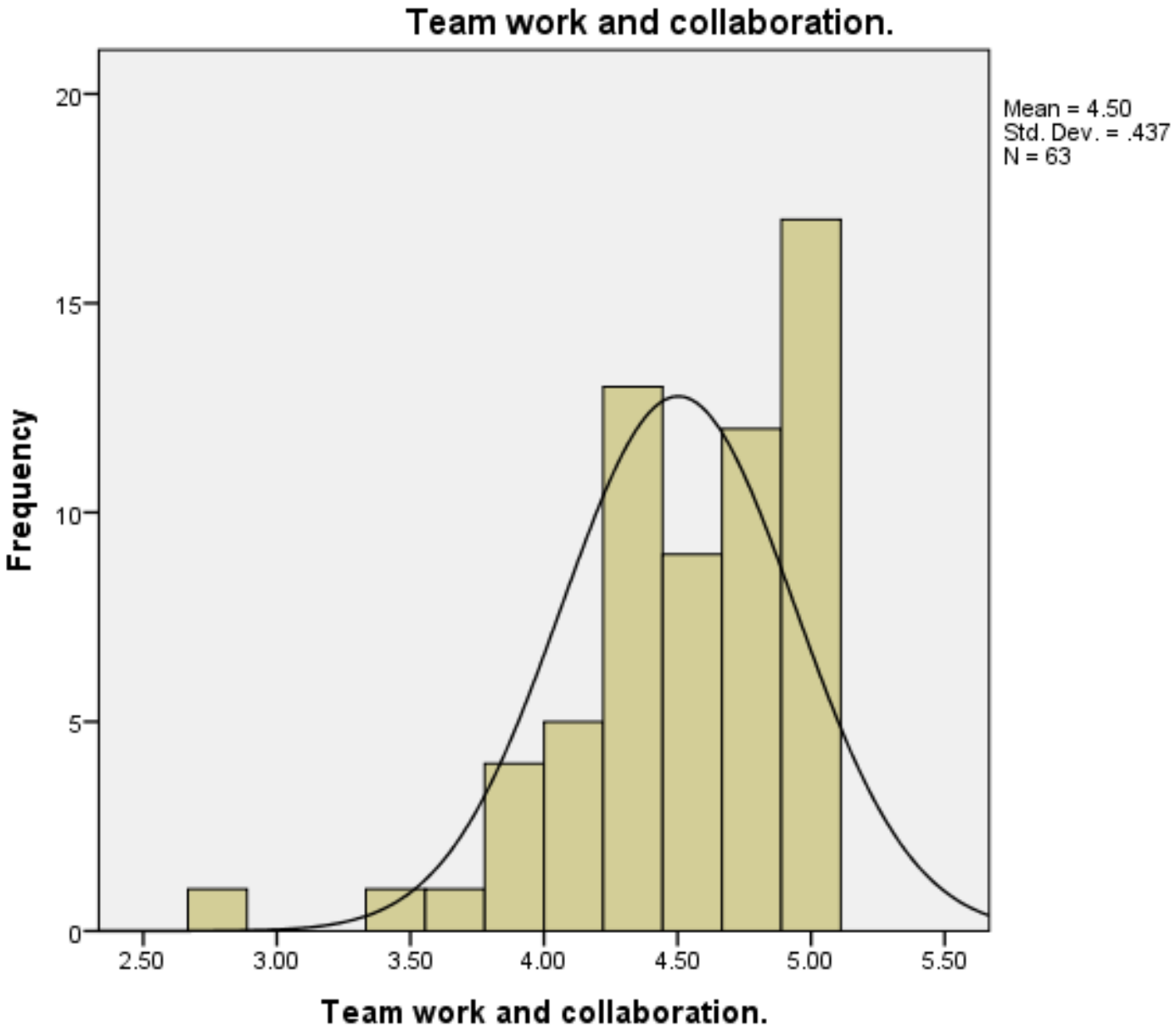


Figure 2. Mean of Negative Professional Identity Subscale Responses.

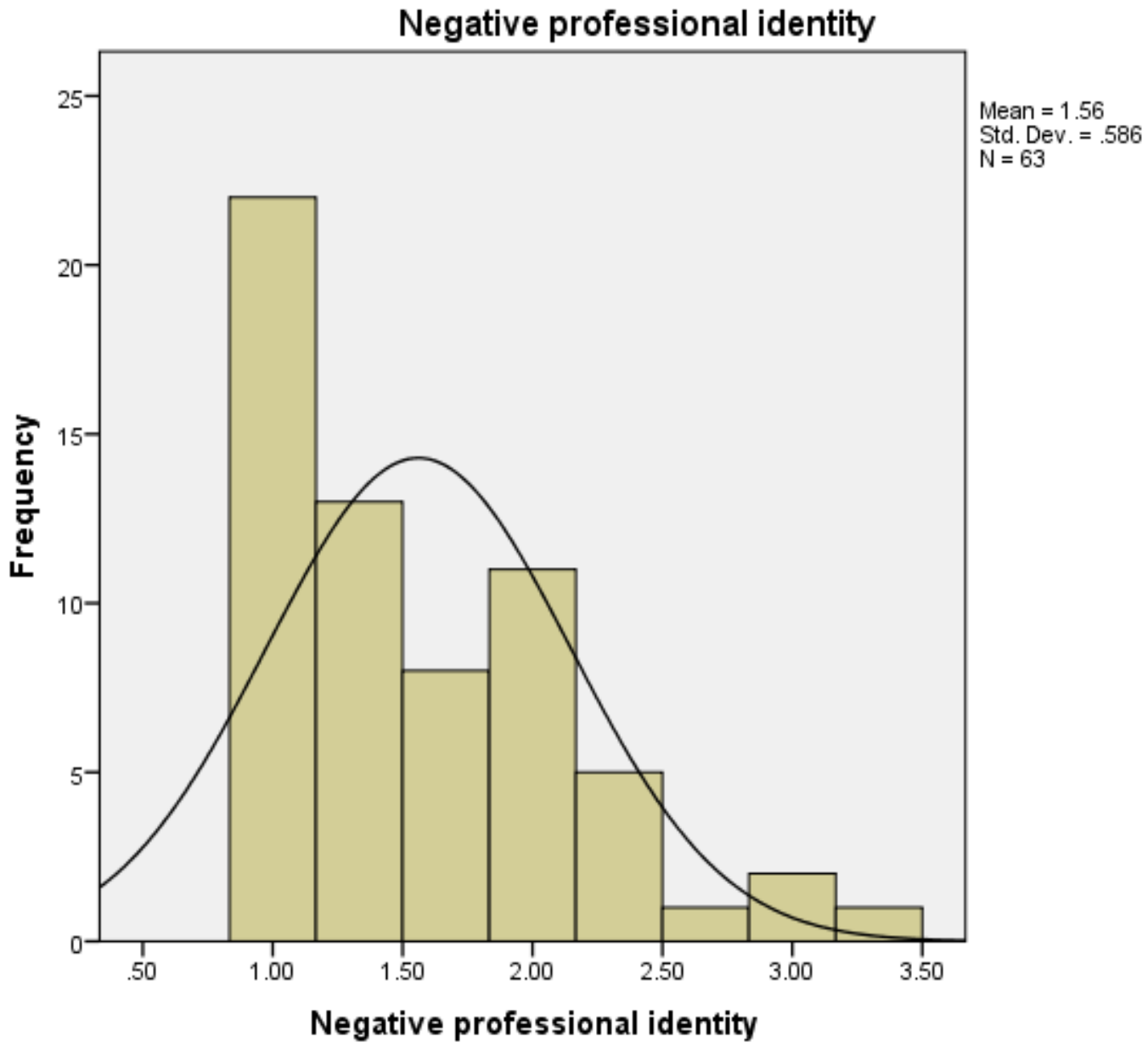
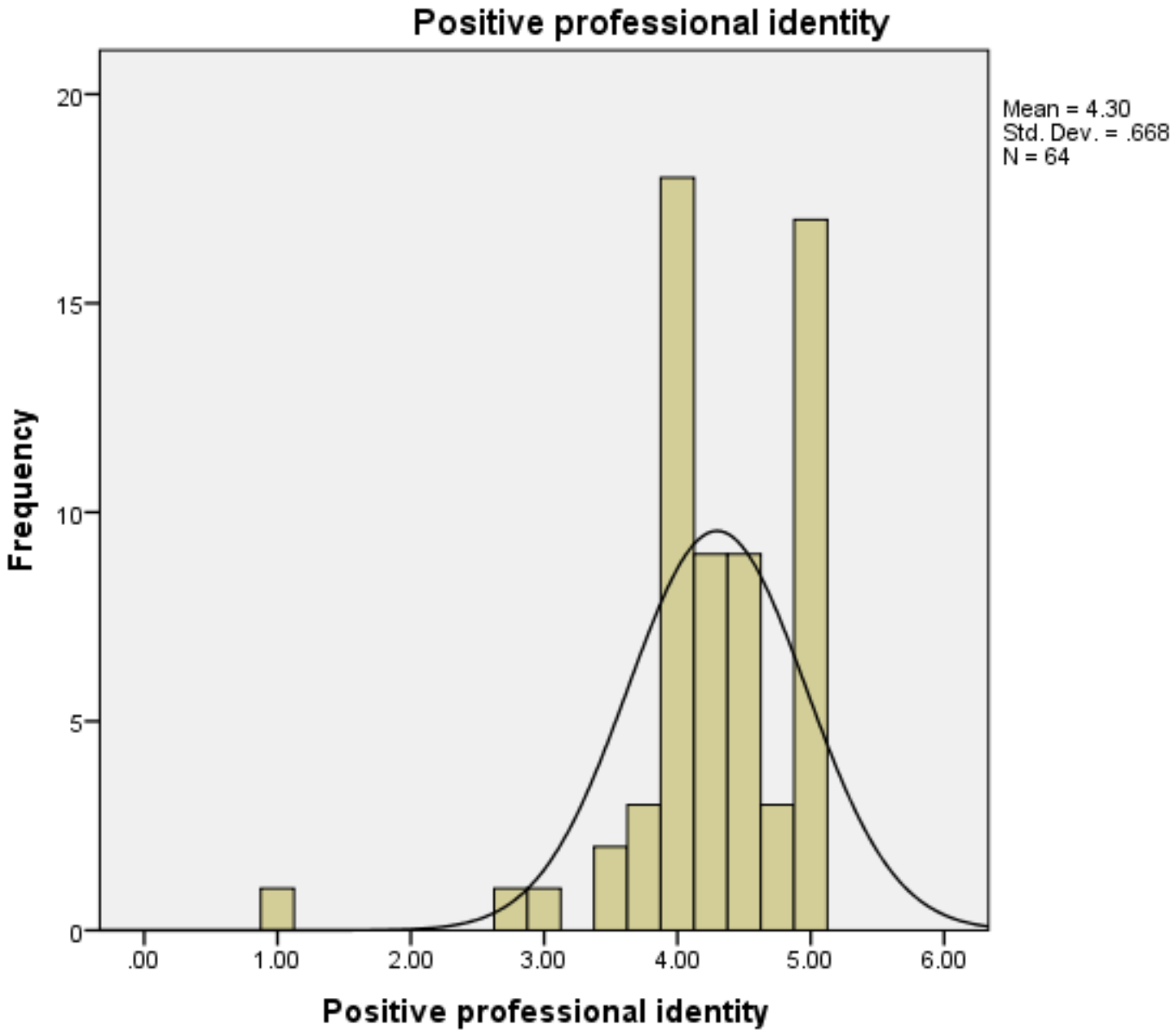


Figure 3. Mean of Positive Professional Identity Subscale Responses.



To answer the second research question (What are counselling students' attitudes/ perceptions of IPE?) one of the additional questions that was included in the survey by the research team was analyzed for commonalities. This question asked the following: "reflecting on your training in your program, what are the take away messages that you have perceived regarding interdisciplinary practice"? Forty four participants answered this survey question and since this question was open-ended, all 44 responses were transferred to a word document and analyzed for key words and/or phrase repetitions. Once the text was analyzed and key words/phrases were organized, four major themes were discovered:

1) There is little training in the area of IPE in counselling, and collaboration is only experienced during work/internships
2) IPE benefits clients and enhances care
3) Confidentiality and ethics are vital and must be maintained
4) Psychologist's role is viewed as least important in health care

Theme 1: Little training of IPE in counselling; collaboration is experienced during work placements

Twenty students indicated that IPE is either rarely addressed or not discussed at all in their current programs. In addition to this, three students indicated interprofessional collaboration was not experienced until they were in the workforce or completing their work placements/internships. When asked about perceptions regarding interdisciplinary practice, one participant indicated "that there is very little training about other disciplines and how we can coordinate services in the best interests of our clients". Another participant stated "my training did not include anything on interdisciplinary work. I took the initiative to seek interdisciplinary opportunities on my own through my training".

Theme 2: IPE benefits clients and enhances care

Sixteen students indicated that they believed interdisciplinary practice to be a crucial aspect to deliver quality care and enhance client/patient experience. Some students indicated that although it can be complex and challenging, it also increases counsellor knowledge and self-awareness, which in turn, benefits clients. One participant indicated that "interdisciplinary 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 interdisciplinary team due to the wide range of mental health/physical health perspectives and approaches".

Theme 3: Confidentiality and ethics are vital and must be maintained

Six students spoke to confidentiality and indicated that although they believe IPE and collaboration to be important and beneficial, confidentiality and ethics must be protected. As one participant stated "…in some ways I have learned it would be beneficial, in others I have been cautioned of the confidentiality constraints…." Another participant stated "I am confused about confidentiality as a counsellor and how that applies to interdisciplinary work".

Theme 4: Psychologist's role is viewed as least important in health care

Five students indicated that they felt, in health care, the role of the psychologist is viewed as being the least important. Some of their perceptions indicated that in health care, the focus is on biology and psychological services are undervalued and over looked. For example, one participant stated the following: "Biopsychosocialculturalspiritual seems to be what "the academy" espouses. And yet, with reductionism, we seem to boil that all down to the bio".

Another participant stated “that interdisciplinary practice is important and the role of psychologists/counsellors in this practice is occasionally overlooked”.

In addition to the above open-ended question, another additional question (question 10) that was created by the research team was also asked to answer this research question. Participants were asked to answer the following closed-ended, multiple choice question: “Overall, which of the following best describes your perception of the importance of interdisciplinary teamwork in the work of a counsellor”?

Forty-five participants (69.2%) endorsed the following statement: “working with other professionals is important and in the best interests of the client”. Ten participants (15.4%) indicated that “counsellors need to consult with other professionals sometimes” and 7 participants (10.8%) indicated “working with other professionals is probably important but I don’t really know what this would look like in counselling”. There were no participants that endorsed the following two statements: 1) “I don’t see why counsellors would ever need to work with anyone except the clients”, and 2) “working with other professionals is against the most important part of counselling”, which was indicated as confidentiality. Table 3 outlines participants’ responses to this question and includes the two “other” responses that were also specified.

Table 3. Participants' Responses to Question 10

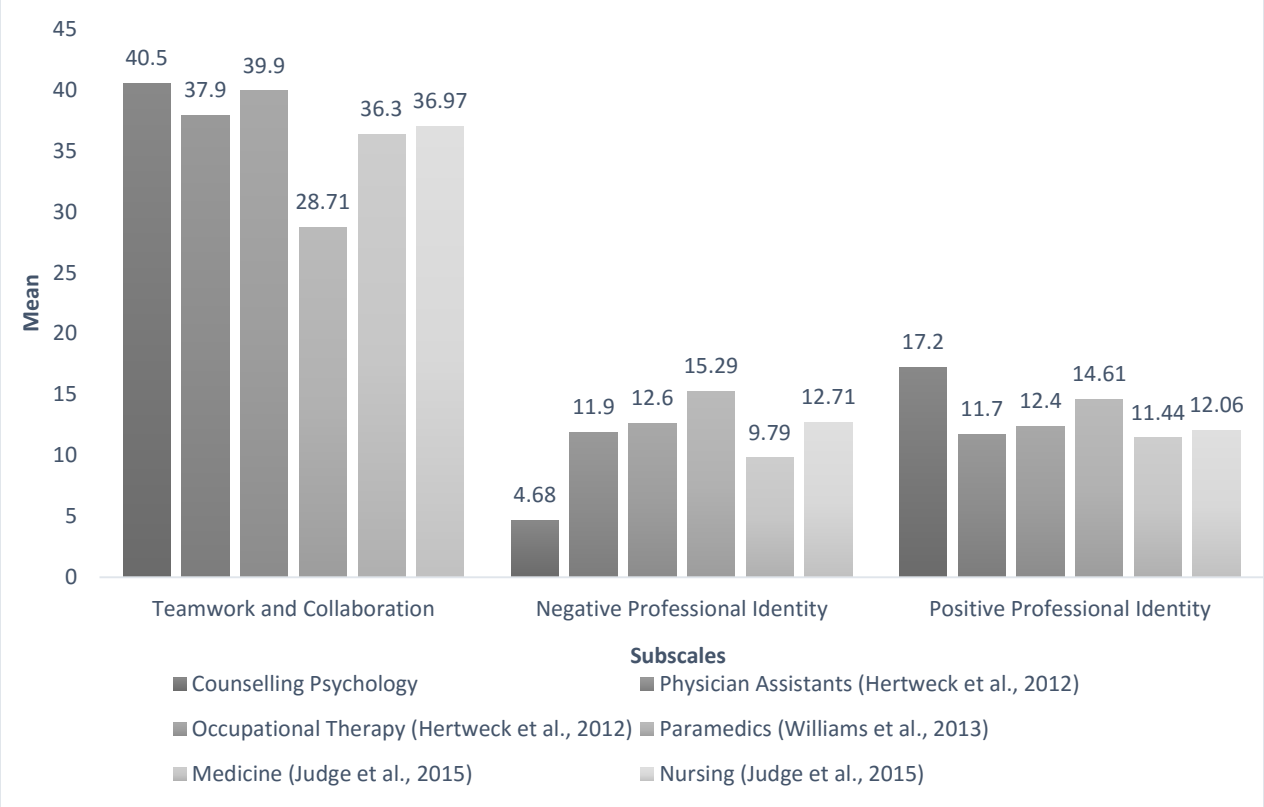
	Number of Responses	Percent of Responses
I don't see why counsellors would ever need to work with anyone except the clients.	0	0
Working with other professionals is against the most important part of counselling: confidentiality. Working with other professionals is unethical.	0	0
Counsellors need to consult with other professionals sometimes.	10	15.4
Working with other professionals is probably important but I don't really know what this would look like in counselling.	7	10.8
Working with other professionals is important and in the best interests of the client.	45	69.2
Other, please specify …	2	3.1
Working with other professionals is important and in the best interests of the client - as long as this is ethically discussed with the client beforehand. Confidentiality and its limits must be discussed prior to information being shared.		
Working with other professionals is important depending on the client's wants and needs, and what they are looking for from us as therapists.		
Total	64	98.5

4.3. Counselling Psychology Students' Attitudes/Perceptions of Interprofessional Collaboration in Relation to other Health Care Programs

To further consider counselling students' attitudes and perceptions of interprofessional collaboration and to answer the third research question, simple mean comparisons were conducted to look at where counselling fell in relation to students' opinions in different health care programs on IPE and collaboration. Figure 4 shows the means of RIPLS subscale scores for the following: counselling students who participated in this study; physician assistant students and occupational therapy students from Hertweck et al.'s (2012) study; paramedic students from Williams et al.'s (2013) study; and medicine and nursing students from Judge et al.'s (2015) study.

As indicated in figure 4, the means of the RIPLS subscale scores are all close in range, with the exception of a few scores. Paramedic students from Williams et al.'s (2015) study had the lowest mean scores for the teamwork and collaboration subscale (28.71) and had the highest score of negative professional identity (15.29). In comparison to all other health care programs, the counselling students from the current study had the highest mean scores on the teamwork and collaboration subscale and the positive professional identity subscale. Additionally, they also had the lowest score on the negative professional identity subscale. However, since statistical analysis has not been computed on these scores, these differences may or may not be statistically significant.

Figure 4. Simple Mean Comparisons of Students' Attitudes/Perception in Different Health Care Programs.



4.4 Correlations among Subscales

Table 4 shows the correlation analysis (Spearman's rho) of each of the RIPLS subscales for the counselling psychology participants of this thesis.

Table 4. Correlational Analysis (Spearman's rho)

Subscale	Subscale	Correlation
Teamwork & Collaboration	Negative Professional Identity	-.533**
Positive Professional Identity	Negative Professional Identity	-.512**
Positive Professional Identity	Teamwork & Collaboration	.698**

**Correlation is significant at the 0.01 level (2-tailed).

As indicated in table 4, there was a negative correlation of .533 between the teamwork and collaboration subscale and the negative professional identity subscale. Additionally, there was a negative correlation of .512 between the positive professional identity subscale and the negative professional identity subscale. There was a positive correlation of .698 between the teamwork and collaboration subscale and the positive professional identity subscale. All correlations were significant at the <0.01 level.

4.5 Conclusion

This chapter presented the results found in the current study including demographics, students' attitudes and perceptions of IPE and collaboration, counselling students' attitudes of IPE in relation to students in other health care programs, and correlations among the RIPLS subscales. In summary, the results indicate that due to high mean scores on the teamwork and collaboration subscale and professional identity subscale, and a low mean score on the negative professional identity subscale, counselling students in this study valued working with, and learning from, other health care professionals. Additionally, a simple mean comparison of scores

on the RIPLS from counselling students and other health care students (i.e., physician assistants, occupational therapy, paramedics, medicine and nursing students) indicate that counselling students and students from these other programs also value IPE and collaboration. These results and their implications will be discussed further in the next section.

Chapter 5: Discussion

This chapter discusses the results that were presented in the previous chapter. The current chapter will link findings from this thesis with findings from other research and discuss its importance, implications, and potential future directions. The findings from this study shed light on current collaborative practices in counselling psychology programs by exploring counselling psychology students' attitudes and perceptions of IPE and whether counselling students value IPE and collaborative practices. This chapter will also discuss the use of the Readiness for Interprofessional Learning Scale and its subscales.

5.1 Students' Attitudes and Perceptions of IPE

The aim of this study was to investigate counselling psychology students' readiness and attitudes and perceptions of interprofessional education. It was hypothesized that counselling psychology students will value IPE and have positive attitudes towards interdisciplinary practice. The mean scores presented in the previous chapter support this hypothesis as students had high mean scores on the Teamwork and Collaboration subscale and on the Positive Professional Identity subscale, and low scores on the Negative Professional Identity subscale. Additionally, it is important to note that, in the current study, it was also predicted that students would have high mean scores on the Roles and Responsibilities subscale; however, due to an unacceptably low reliability of this subscale, those results were omitted from this study. The Roles and Responsibilities subscale is discussed below in more detail. Somewhat comparable to this thesis, Hertweck et al. (2012) conducted a study in the United States using the RIPLS questionnaire in which they compared RIPLS scores of physician assistant (PA) students to other health care students, including students from counselling psychology. They found that PA students appeared to value working with other health professional students less than health care students in other

programs (i.e., occupational therapy, physical therapy and counselling psychology) (Hertweck et al., 2012). Although it was not the main focus of their study, Hertweck et al. (2012) also indicated that counselling psychology students had a high mean score on the Teamwork and Collaboration subscale, which was also found in this thesis. Findings from this thesis and the counselling psychology RIPLS scores from Hertweck et al.'s (2012) research also add to gaps in the literature regarding IPE and collaboration in relation to counselling psychology students.

Since there was limited literature available regarding the use of the RIPLS with students in professional psychology, it was difficult to link findings from the RIPLS scores in this thesis with RIPLS scores from other research. However, there has been some research conducted on the perspectives of IPE and collaboration with Canadian students in graduate psychology programs (Church et al., 2009) and Canadian psychologists and psychiatrists (Lee, Schneider, Bellefontaine, Davidson, & Robertson, 2012) that have not used the RIPLS questionnaire. Church et al. (2009) found that 92% of psychology student respondents thought that collaborative practice would be important or very important in their future practice. Lee et al. (2012) found that overall, the majority of autonomous psychologists and psychiatrists would be willing to work collaboratively with each other. These findings are consistent with findings from this thesis as the majority of counselling psychology students indicated that working with other professionals is important and is in the best interest of the client.

There has been research involving other health and human services professionals, such as social workers, that have also found that individuals in this profession value IPE and collaboration. For instance, in 2005, the Centre for Collaborative Health at Memorial University introduced an IPE program that brought together students from social work, pharmacy, nursing and medicine to encourage IPE activities (Hardy Cox, Sullivan, & Button, 2012). Social work

students were asked to rate their opinions with reference to their feelings, beliefs and experiences towards the IPE module. The results indicated that overall, social work students reported positive attitudes towards interprofessional teamwork experiences (Hardy Cox et al., 2012). Additionally, students also indicated positive group dynamics and a high level of satisfaction with their learning experience (Hardy Cox et al., 2012). Another study conducted with social work students and nursing students also found that when students participated in an interdisciplinary seminar, students reported gaining an appreciation for learning about each other's roles for future collaboration (Chan, Chi, Ching & Lam, 2010). Student's also discovered that sharing information challenged old behaviours of working alone and that collaborative effort can optimize time, which therefore promotes better patient care (Chan et al., 2010). These results are similar to results from this thesis as well since counselling psychology students indicated that working with other health professionals can provide clients with more comprehensive care. Although social work and psychology are not the same profession, they overlap in many areas and are both considered mental health providers. Both professions can be involved in interprofessional education and practice to provide positive care to their clients/patients.

One of the major themes from the findings indicated that students perceived that they had little opportunities during their graduate education to experience interdisciplinary collaboration. This finding also supports the second hypothesis of this thesis, which predicted that counselling psychology students would indicate very few opportunities for interprofessional education in their programs. Many students in counselling psychology indicated that their training did not include interdisciplinary teamwork and some students indicated that they sought out interdisciplinary opportunities on their own. Church et al. (2009) found that 71% of students from their study indicated that psychology's lack of integration with other programs was a

significant barrier to IPE opportunities. In addition, similar to this thesis, Church et al. (2009) found that many psychology students stated that there were not enough opportunities for IPE and collaboration in their programs and structures were not in place to support interprofessional learning. Wellmon, Gilin, Knauss and Inman Linn (2012) also found that students in clinical psychology, physical therapy and social work indicated that they do not always have the opportunity for clinical internships that require collaboration with other professions. While there is an extensive amount of literature on interprofessional collaboration in health care (Hall & Weaver, 2001; Herbert, 2005; Sullivan et al., 2015) and on the need for IPE and collaboration (WHO, 2008; WHO, 2010), there is limited discussion about IP collaboration in counsellor education (Arthur & Russell-Mayhew, 2010). This may be due to limited training opportunities of counselling students to learn with, and from, students in other disciplines.

Another theme identified in the results suggested that regardless of limited opportunities to work with other disciplines, counselling students believed that IPE and collaboration is beneficial to clients and is a crucial factor in delivering quality care. The literature supports the idea that interprofessional collaboration is considered best practice and enhances care and patient satisfaction (CHIC, 2009; Herbert, 2005; WHO, 2010) and a large majority of counselling students from this thesis, support these statements, despite limited opportunities to learn about, and experience, IPE in their program. Some students also indicated that the role of the psychologist is often viewed as “least important” and psychological services are undervalued. Similarly, Church et al. (2009) found that psychology students indicated that another barrier to participating in IPE and collaboration was that other programs did not consider psychology a health profession. These findings may speak to the lack of research available in the area of IPE

and collaboration with counsellors and psychologists and also highlights the importance of more advocating for the overall value of psychology on healthcare teams.

5.2 Counselling Psychology Students' Attitudes/Perceptions of Interprofessional Collaboration in Relation to other Health Care Programs

Attitudinal factors of IPE can either improve or prevent the facilitation of collaborative practice (Parsell & Bligh, 1999) and have been identified as being the major factor that hinders the implementation of interprofessional learning (Aziz et al., 2011). In this current thesis, simple mean comparisons were conducted to see how counselling students compare and differ in their attitudes and perceptions of IPE with students from other health care disciplines (i.e., physician assistant students, occupational therapy students, paramedic students, nursing students and medical students). The simple mean comparisons of this data provided context to answer the third research question of this thesis, which asked how counselling students' attitudes of IPE and collaboration compared to other students' attitudes who are from different health care programs.

It was hypothesized that counselling psychology students and students from different health care programs will have similar attitudes towards IPE and collaboration. The scores of the three subscales (Teamwork and Collaboration, Negative Professional Identity and Positive Professional Identity) support this hypothesis as the subscale scores were in relatively close range of each other for all disciplines. Although the counselling psychology students from this thesis had the highest scores on the Teamwork and Collaboration subscale and the Positive Professional Identity subscale, as well as the lowest score on the Negative Professional Identity subscale, it has not been determined if these differences are statistically significant. However, it is evident from the high scores on the Teamwork and Collaboration subscale that all of the disciplines that have been compared in this study value teamwork and collaboration and

therefore should be open to the idea of working with, and learning from, students from other disciplines. Aziz et al. (2011) argues that "it makes sense for the different healthcare professionals to learn together to promote collaborative practice because their knowledge, skills and professional attitudes are mostly complementary and overlapping and that almost everyone who seeks medical care may interact with more than one health professional" (p. 640). Therefore, based on findings from this thesis, it could be suggested that interprofessional education would be appreciated if counselling students were given the opportunity to work with other disciplines since the majority of health care students valued teamwork and collaboration.

5.3 Implications and Recommendations

As previously mentioned, the results from this thesis indicated that counselling psychology students value IPE and collaboration, which suggest that they would be willing to work with, and learn from, other health care students. Additionally, a simple mean comparison of RIPLS scores with students in other health care programs suggested that these students would also be open to IPE and collaboration. Therefore, if IP collaboration is being recognized as best practice in health care, and health care students also value working with each other, it seems both necessary and logical that students should be given opportunities to work and learn together. Although it is not without its challenges, IPE is possible with persistence and commitment from school administrators, faculty and students (Bridges et al., 2011).

There are numerous factors that are crucial to successfully implementing IPE into programs and activities. Recommendations offered by Bridges et al. (2011) include the following: 1) There may need to be significant changes in curriculum to incorporate IP learning activities and therefore administrative support from deans, curriculum committees, and educational administrators is essential; 2) Faculty members are needed from each college or

department to provide leadership, recruit other faculty members, and coordinate activities between colleges or departments; 3) Faculty members also need to be committed to and educated on IPE to provide leadership to student groups; and 4) Student efforts should be acknowledged through awards, certificates or grades. These recommendations are beneficial and relevant to all programs, including counselling psychology, which should consider implementing IPE to equip students with the skills required to practice IP collaboration. As stated by Tippin and Maranzan (2012) "what is needed for the practice of psychology, and indeed for all of the health care professions, is education and training in interprofessional practice. The development of common standards and curricula for collaborative practice will not only prepare us to practice collaboratively, they may also facilitate examination of the model's use as a strategy to improve health care" (p.35).

Professional associations can also provide opportunities to facilitate interdisciplinary activities and education between different health care disciplines. Church et al. (2009) found that psychology students had several suggestions on how the Canadian Psychological Association (CPA) could help provide IPE and collaborative opportunities. For examples, students indicated that the CPA could organize events at their conventions that include multidisciplinary speakers; they could promote the advantages of IP collaboration and encourage programs to implement interdisciplinary education; they could develop standards and guidelines for IPE; they could foster stronger links with other professional organizations; and they could change their accreditation guidelines to allow for interprofessional training, which includes cross-disciplinary supervision (Church et al., 2009). There were also suggestions by students that indicated that the CPA should play a stronger role in encouraging and advocating for more interdisciplinary research. Examples of this include finding funding for students to conduct IP research and

emphasizing IP collaborative work in CPA journals (Church et al., 2009). Many of these recommendations could also be applied in the educational environment as well. For example, school/program administrators could hold interdisciplinary conferences and invite professionals to speak on IP collaboration, they could also promote and provide more opportunities for interdisciplinary research. If educational institutions and professional associations took these recommendations into account, health care students and professionals would have even more opportunities to work with, and learn from, each other, which in turn, could enable optimal health outcomes and increase quality patient care (CIHC, 2010).

5.4 Reliability of the Readiness for Interprofessional Learning Scale

The internal reliability of three out of the four subscales were in excess of 0.75, with two of the subscales being in excess of 0.80. However, as previously mentioned, the Cronbach alpha value of the Roles and Responsibilities subscale was considered poor and was not included in the results. McFadyen, Webster and Maclaren (2006) indicate various authors have suggested different values of Cronbach's alpha that is considered acceptable for internal consistency. However, it seems acceptable that any $\alpha < 0.60$ should be considered unacceptable (McFadyen et al., 2006). Therefore, since the Cronbach alpha value of the Role and Responsibilities subscale of this current thesis was less than .60, this subscale was omitted from the results. This is consistent with other research as the Roles and Responsibilities subscale has been noted by other researchers as having low internal consistency (Aziz et al., 2011; King et al., 2011; Mahler et al., 2014; McFadyen et al., 2005; McFadyen et al., 2006). Additionally, the original work on the RIPLS that was conducted by Parsell and Bligh (1999) also reported an unacceptable internal consistency for the Roles and Responsibilities subscale, suggesting that further investigation is required into this subscale.

There have been suggestions made by researchers to account for the weak internal consistency of the Roles and Responsibilities subscale. McFadyen et al. (2005, 2006) argue that this subscale may have weak internal consistency due to lack of professional experience among younger students. However, similar to findings from other research (King et al., 2011; Mahler et al., 2014), this study cannot attribute its findings to young students with lack of experience. Over 75% of students who participated in this RIPLS survey indicated that they had previous interprofessional experience but it is not known if this was experienced during their education or through professional work experience. These results are consistent with King et al.'s (2011) findings that suggest it is not only students in the early part of their programs that are unsure of their roles and responsibilities. They indicate that students who have not had any clinical practice during their graduate programs might also be struggling with understanding their professional roles and responsibilities as well (King et al., 2011).

Mahler et al. (2014) suggest that further research into the Roles and Responsibilities subscales is needed to explain its low internal consistency. They indicate various factors could have an influence on the results, such as an individual's exposure to various health professionals (either during training or when they are in their professional workplace); students and professionals having different backgrounds regarding teamwork and collaboration; and not knowing at which stage a student or professional first considers themselves as being part of an IP team (Mahler et al., 2014). All of these reasons, along with findings from this thesis and other research, indicate that the Role and Responsibilities subscale is unreliable and should be further investigated.

5.5 Limitations

This study was based on the RIPLS questionnaire that was originally created by Parsell and Bligh (1999) and adapted by McFadyen et al. (2005). Although the RIPLS has been used numerous times in studies regarding interprofessional education, there are some limitations to this questionnaire (Hertweck et al., 2012), which therefore limit this study. For instance, there is not an equal number of questions in each subscale which makes it difficult to measure the significance of subscale scores (Hertweck et al., 2012). There are only three items in the Roles and Responsibilities subscale and Hertweck et al. (2012) indicate that they are limited in scope when compared to the nine questions that have more breadth that are included in the Teamwork and Collaboration subscale. Hertweck et al. (2012) suggest using a questionnaire that has a relatively equal number of items in each subscale, as well as subscales that have more than three questions each. Additionally, as previously indicated, the Roles and Responsibilities subscale has shown to have a low reliability in many studies, including this current thesis. Therefore, it has been suggested that further investigation is needed into this subscale of the RIPLS. Hertweck et al. (2012) also indicate that the titles of the RIPLS seem to be misleading in relation to the content of the item. For example, they indicate that in the Positive Professional Identity subscale, there are three items that focus on shared learning experiences and it is unclear how these items relate to an indication of positive professional identity (Hertweck et al., 2012).

Another limitation to this current study was the lack of previously published research available in the area of interprofessional education and counselling psychology. Due to the limited ability of the use of the RIPLS questionnaire with other counselling psychology students, there was a significant obstacle in finding trends in the research. It is evident from this current

thesis that counselling psychology students value interprofessional education and collaboration and therefore it is important that they be included in future research in this area.

Lastly, the use of convenience sampling limits the generalizability of this study. Williams et al. (2012) indicate that while using this method makes it easier to recruit participants, it also makes it less likely to recruit a representative sample. Although there were students from three Canadian universities that were invited to participate in the RIPLS survey, there were a total of 65 students that participated, which cannot be considered a good representation of the entire counselling psychology population. In addition, it is possible that those participants that did volunteer to respond could bias the results since the RIPLS is a self-report scale (Williams et al., 2012) and those students who choose to participate may have a greater interest in interprofessional education.

5.6 Study Conclusions

This paper explored the readiness for, and attitudes and perceptions of, IPE among counselling psychology students in three universities in Canada. To answer the research questions, the RIPLS questionnaire was answered by 65 counselling psychology students. The psychometric properties of the RIPLS was consistent with previous literature on the instrument. The high mean scores on the Teamwork and Collaboration subscale and on the Positive Professional Identity subscale, as well as low mean scores on the Negative Professional Identity subscale suggested that counselling students value IPE and have favorable attitudes towards interprofessional learning. Major themes identified in this thesis also highlighted that counselling psychology students have positive attitudes and perceptions of IPE and collaboration. Although many students indicated that there were little opportunities to participate in IPE in their programs, a large number of students indicated that shared learning and interprofessional

collaboration benefits clients and enhances client care. This information is encouraging for psychology program administrators who wish to follow health care trends and introduce and implement IPE in professional psychology programs.

As previously indicated, there was limited research available on the use of the RIPLS with counselling psychology students and therefore simple mean comparisons were conducted on RIPLS scores with students from other disciplines. This comparison indicated that counselling students and students from other health care disciplines value IPE and collaboration. This suggests that students from counselling psychology, as well as students from other health care programs would be willing to learn with, and from, each other if they were given the opportunity to work/learn collaboratively during education.

As there was limited literature in general regarding counselling psychology and IPE and collaboration, this thesis also expands the literature by adding graduate counselling psychology students' attitudes and perceptions to the area of interprofessional collaboration. The results indicated that counselling psychology students value IPE and collaboration. Therefore, information obtained from this study suggest an imperative need to develop opportunities for counselling psychology students to be included in collaborative practice so they can be prepared with the skills necessary to work with professionals from different disciplines to provide optimal patient care. Furthermore, this thesis also highlights the importance of future research on the exploration of IPE and counselling psychology, as well as the effectiveness of incorporating IPE into counsellor curriculum. Baird (2009) indicates that in order to produce a future health care workforce with positive perceptions on interdisciplinary collaboration, fundamental understanding and acceptance of other disciplines must begin at the graduate educational level.

This is also true for counselling psychology students who must be given the opportunity during their pre-licensure education to learn with, and from, other health care disciplines.

References

Arredondo, P., Shealy, C., Neale, M., & Winfrey, L.L. (2004). Consultation and IP collaboration; Modeling for the future. *Journal of Clinical Psychology. 60*(7), 787-800.

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

Aziz, Z., Teck, L.C., & Yen, P.Y. (2011). The attitudes of medical, nursing and pharmacy students to inter-professional learning. *Procedia - Social and Behavioral Sciences, 29*, 639 – 645.

Bailey, D. (2004). The contribution of work-based supervision to interprofessional learning on a masters programme in Community Mental Health. *Active Learning in Higher Education, 5(3),* 263–278.

Baird, K.R. (2009). Perceptions regarding interdisciplinary collaboration of graduate students in health-related graduate programs (Doctoral dissertation). Retrieved from http://rave.ohiolink.edu/etdc/view?acc_num=ucin1353950577

Barr, H. (2000). *Interprofessional Education: 1997-2000. A review*. United Kingdom Central Council of Nursing, Midwifery and Health Visiting, London: England,

Bellack, J. P. & O'Neil, E. H. (2000). Recreating nursing practice for a new century. *Nursing and Health Care Perspectives, 21*(1), 14-21.

Bernard, J. M., & Goodyear, R. K. (2009). *Fundamentals of clinical supervision* (4th ed.). Boston, MA: Pearson Education.

Bower, P., Knowles, S., Coventry, P. A., & Rowland, N. (2011). Counselling for mental health and psychosocial problems in primary care (Review). *The Cochrane Library, 9,* 1-76.

Bridges, D. R., Davidson, R. A., Odegard, P. S., Maki, I. V., & Tomkowiak, J. (2011). Interprofessional collaboration: Three best practice models of interprofessional education. *Medical Education Online, 16,* 10.3402/meo.v16i0.6035. http://doi.org/10.3402/meo.v16i0.6035

Canadian Mental Health Association (2015*). Canadian collaborative mental health initiative.* Retrieved from https://ontario.cmha.ca/public-policy/knowledge-exchange/canadian-collaborative-mental-health-initiative /

Canadian Mental Health Association (2011). *Project IN4M integrating needs for mental well-being into human resource planning. Final report.* Retrieved from http://www.cpa.ca/docs/File/Publications/Project_IN4M-FINAL_REPORT.pdf

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

Canadian Interprofessional Health Collaborative (2014). *CICH overview*. Retrieved from http://www.cihc.ca/about/overview.

Canadian Interprofessional Health Collaborative (2009). *Program evaluation for interprofessional initiatives: Evaluation instruments/methods of the 20 IECPCP projects.* Retrieved from http://www.cihc.ca/files/CIHC_EvalMethods_Final.pdf

Cefola, J., Brotsky, C., & Hanson R. (2010). Shared services: A guide to creating collaborative solutions for nonprofits. Retrieved from http://www.chfcanada.coop/eng/pdf/fedconf_2014/5.%20Shared%20Services%20a%20Guide%20to%20Creating%20Collaborative%20Solutions.pdf

Chan, E. A., Chi, S. P. M., Ching, S. and Lam, S. K. (2010), Interprofessional education: the interface of nursing and social work. *Journal of Clinical Nursing*, *19*(1-2), 168–176.

Church, E., Robinson, L., & Goodwin, J. (2009). Interprofessional education in Canadian graduate psychology programs. Paper presented at the annual conference of the Canadian Psychological Association, Montreal, QC, June.

Cohen, K.R. & Lemire, F. (2010). *Mental health table forum. Which doors lead to where? How to enhance access to mental health service: Barriers, facilitators and opportunities for Canadians' mental health.* Retrieved from http://www.cpa.ca/docs/File/Executive%20Office/MHTREPORT2011EnglishFinal.pdf

Cox, J., Adams, E., & Loughran, M.J. (2014). Behavioral health training is good medicine for counseling trainees: Two curricular experiences in interprofessional collaboration. *Journal of Mental Health Counseling*, *36*(2), 115-129.

Cubic, B., Mance, J., Turgesen, J. N., & Lamanna, J. D. (2012). Interprofessional education: Preparing psychologists for success in integrated primary care. *J Clin Psychol Med Setting*, *19*(1), 84-92.

Curran, V., Sharpe, D., Flynn, K., & Button, P. (2010). A longitudinal study of the effect of an interprofessional education curriculum on student satisfaction and attitudes towards interprofessional teamwork and education. *Journal of Interprofessional Care, 24*(1), 41-52.

Eatock, J. (2006). *The SAGE handbook of counselling and psychotherapy* (2nd Ed). C. Feltham & I. Horton (Eds). London: SAGE Publications.

Engel, J. & Prentice, D. (2013). The ethics of interprofessional collaboration. *Nursing Ethics, 20*(4), 426-435.

Freeth, D., Meyer, J., Reeves, S., & Spilsbury, K. (1998). Of drops in the ocean and stalactites: Interprofessional education within healthcare settings. Belfast: Queen's University

Garcia-Shelton, L. & Vogel, M.E. (2002). Primary care health psychology training: A collaborative model with family practice. *Professional Psychology: Research and Practice, 33*(6), 546-556.

Gilbert, J. H. V. (2005). Interprofessional learning and higher education structural barriers. *Journal of Interprofessional Care, 19*(Suppl. 1), 87-106.

Greenberg, R. S., & Bellack, J. P. (1999). Building an interdisciplinary culture. In D.E. Holmes, & M. Osterweis (Eds.), *Catalysts in interdisciplinary education* (pp. 59-79). Washington, DC: Association of Academic Health Centers.

Haley, W. E., McDaniel, S.H., Bray, J. H., Frank, R. G., Heldring, M., Bennett Johnson, S., Go Lu, E., Reed, G. M., & Wiggins, J. G. (1998). Psychological practice in primary care settings: Practical tips for clinicians. *Professional Psychology: Research and Practice, 29*(3), 237-244.

Hall, P., & Weaver, L. (2001). Interdisciplinary education and teamwork: A long and winding road. *Medical Education, 35*(9), 867-875.

Handron, D., Diamond, J., & Zlotnik, J. L. (2001). Challenges of providing interdisciplinary mental health education. *Journal of Family Social Work, 5*(3), p.49-62.

Hardy Cox, D., Sullivan, M., & Button, P. (2012). Attitudes of undergraduate social work students toward interprofessional health care practice and interprofessional health care education. *Intersectionalities: A Global Journal of Social Work Analysis, Research, Polity, and Practice, 1,* 37-52.

Hargrove, D. S. (1982). The rural psychologist as generalist: A challenge for professional identity. *Professional Psychology: Research and Practice, 13,* 302–308.

Harris, B.A. (2006). Interdisciplinary education: What, why and when? *Journal of Physical Therapy Education, 20(2),* 3-8.

Heale, R., Mossey, S., Lafoley, B., & Gorham, R. (2009). Identification of facilitators and barriers to the role of a mentor in the clinical setting. *Journal of Interprofessional Care, 23*(4), 369–379.

Heath, O. J., Cornish, P. A., Callanan, T., Flynn, K., Church, E., Curran, V., & Bethune, C. (2008). Building interprofessional primary care capacity in mental health services in rural communities in Newfoundland and Labrador: An innovative training model. *Canadian Journal of Community Mental Health, 27*(2), 165-178.

Herbert, C. P. (2005). Changing the culture: IP education for collaborative patient-centered practice in Canada. *Journal of IP Care, 19*(1), 1-4.

Hertweck, M. L., Hawkins, S. R., Bednarek, M. L, Goreczny, A. J., Schreiber, J. L., & Sterrett, S. E. (2012). Attitudes toward interprofessional education: Comparing physician assistant and other health care professions students. *J Physician Assist Educ, 23*(2), 8-1

Ho, K., Jarvis-Selinger, S., Borduas, F., Frank, B., Hall, P., Handfield-Jones, R., Hardwick, D.F., Lockyer, J., Sinclair, D., Novak Lauscher, H., Ferdinands, L., MacLeod, A., Robitaille, M.A., & Rouleau, M. (2008). Making interprofessional education work: The strategic roles of the academy. *Academic Medicine, 83*(10), 934–940.

Horsburgh, M., Lamdin, R., & Williamson, E. (2001). Multiprofessional learning: The attitudes of medical, nursing and pharmacy students to shared learning. *Med. Educ. 35*(9), 876–883.

Illingworth, P., & Chelvanayagam, S. (2007). Benefits of interprofessional education in health care. *British Journal of Nursing, 16*(2), 121-124.

Institute of Medicine (1996). *Primary care: America's health in a new era.* Washington: National Academy Press.

Interdisciplinary Primary Health Care: Finding the answers – A case study report (n.d). Retrieved from http://www.eicp.ca/en/toolkit/EICP-Case-Studies-Report-Final-Aug-14.pdf

Johnson, K. F., & Freeman, K. L. (2014). Integrating IP education and collaboration competencies (IPEC) into mental health counselor education. *Journal of Mental Health Counseling*, 36(4), 238-344.

Judge, M. P., Polifroni, E. C., Maruca, A. T., Hobson, M. E., Leschak, A., & Zakewicz (2015). Evaluation of students' receptiveness and response to an interprofessional learning activity across health care disciplines: An approach toward team development in healthcare. *International Journal of Nursing Sciences, 2*(1), 93-98.

Kates, N., Crustolo, A., Farrar, S., & Nikolaou, L. (2002). Counsellors in primary care: Benefits and lessons learned. *The Canadian Journal of Psychiatry*, 47(9), 857-862.

Keshtkaran, Z., Sharif, F., & Rambod, M. (2014). Students' readiness for and perception of inter-professional learning: A cross-sectional study. *Nurse Education Today, 34*(6), 991-998.

King, S., Greidanus, E., Major, R., Loverso, T., Knowles, A., Carbonaro, M., & Bahry, L. (2011). A cross-institutional examination of readiness for interprofessional learning. *Journal of Interprofessional Care,* 26(2), 108-114.

Lee, C. M., Schneider, B. H., Bellefontaine, S., Davidson, S., & Robertson, C. (2012). Interprofessional collaboration: A survey of Canadian psychologists and psychiatrists. *Canadian Psychology, 53*(3), 159-164.

Mahler, C., Rochon, J., Karstens, S., Szecsenyi, J., & Hermann K. (2014). Internal consistency of the readiness for interprofessional learning scale in German health care students and professionals. *BMC Medical Education, 14*(145), 1-7.

McDaniel, S. H., Belar, C. D., Schroeder, C., Hargrove, D. S., & Freeman, E. L. (2002). A training curriculum for professional psychologists in primary care. *Professional Psychology: Research and Practice, 33*(1), 65–72.

McFadyen, A. K., Webster, V., Strachan, K., Figgins, E., Brown, H., & McKechnie, J. (2005). The readiness for interprofessional learning scale: A possible more stable sub-scale model for the original version of RIPLS. *J. Interprof. Care 19*(6), 595–603.

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.

Nolte, J. (2005). *Enhancing interdisciplinary collaboration in primary health care in Canada.* Retrieved from http://www.eicp.ca/en/resources/pdfs/enhancing-interdisciplinary-collaboration-in-primary-health-care-in-canada.pdf

Oandasan, I. & Reeves. S. (2005). Key elements of interprofessional education. Part 2: Factors, processes and outcomes. *Journal of Interprofessional Care, 19*(suppl.1), 39-48.

O'Neill, B. J. & Wyness, M. A. (2005). Student voices on an interprofessional course. *Medical Teacher, 27*(5), 433-438.

O'Neil, E. H., & the Pew Health Professions Commission. (1998). *Recreating health professional practice for a new century*. San Fransico: Pew Health Professions Commission.

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. A report to the Canadian Psychological Association.* Retrieved from http://www.cpa.ca/docs/File/Position/An_Imperative_for_Change.pdf

Radley A., Cramer D, &. Kennedy M. (1997). Specialist counsellors in primary care; the experience and preferences of general practitioners. *Counselling Psychology Quarterly, 10*(2), 165-173.

Reid, R., Bruce, D., Allstaff, K., & McLernon, D. (2006). Validating the readiness for interprofessional learning scale (RIPLS) in the postgraduate context: Are health care professionals ready for IPL? *Med. Educ. 40*(5), 415–422.

Ruddy, N. B., Borresen, D. A., Wood Johnson, R., & Gunn, W. B. (2008). *The collaborative psychotherapist: Creating reciprocal relationships with medical professionals.* Washington: American Psychological Association.

Sharpe, D., & Curran, V. (2008). *Collaborating for education and practice: An interprofessional education strategy for Newfoundland and Labrador*. Retrieved from https://www.med.mun.ca/getdoc/5e45a5b4-a824-43d6-ba38-aa6edc83150e/HC-Final-Report-June-2008.aspx

Spruill, J. (1998). Interprofessional health care services in primary care settings: Implications for the education and training of psychologists. Retrieved from https://www.apa.org/ed/resources/samhsa.pdf

Sullivan, M., Kiovsky, R. D., Mason, D.J., Hill, C. D., & Dukes, C. (2015). IP collaboration in education. *American Journal of Nursing, 115*(3), 47-54.

Suter, E., Arndt, J., Arthur, N., Parboosing, J., Taylor, E., & Deutschlander, S. (2009). Role understanding and effective communication as core competencies for IP collaborative practice. *Journal of IP Care, 23*(1), 41–51.

Thistlethwaite, J. (2012). Interprofessional education: A review of context, learning and the research agenda. *Medical Education, 46*(1), 58–70.

Tippin, G. K., & Maranzan, K. A. (2012). Interprofessional care: What it is, why it matters, and what is needed. *Psynopsis: Canada's Psychology Magazine, 34*(1), 35.

Tucker, C. M., Ferdinand, L. A., Mirsu-Paun, A., Herman, K. C., Delgado-Romero, E., Van den Berg, J. J., & Jones, J. D. (2007). The role of counseling psychologists in reducing health disparities. *The Counseling Psychologist, 35*(5), 650-678.

Tunstall-Pedoe, S., Rink, E., & Hilton, S. (2003). Student attitudes to undergraduate interprofessional education. *Journal of Interprofessional Care, 17*(2), 161–172.

Van Beek, K., Duchemin, S., Gersh, G., Pettigrew, S., Silva, P., Luskin, B. (2008). Counseling and wellness services integrated with primary care: A delivery system that works. *The Permanente Journal, 12*(4), 20-24.

Wakely, L., Brown, L., & Burrows, J. (2013). Evaluating interprofessional learning modules: Health students' attitudes to interprofessional practice. *Journal of Interprofessional Care, 27*(5), 424-425.

Wellmon, R., Gilin, B., Knauss, L., & Inman Linn, M. (2012). Changes in student attitudes toward interprofessional learning and collaboration arising from case-based educational experience. *J Allied Health, 41*(1), 26-34.

Wilhelmsson, M., Ponzer, S., Dahlgren, L.O., Timpka, T., & Faresjo, T. (2011). Are female students in general and nursing students more ready for teamwork and interprofessional collaboration in healthcare? *BMC Medical Education, 11*(15), 1-10.

Williams, B., Boyle, M., Brightwell, R., McCall, M., McMullen, P., Munro, G., Munro, G., OMeara, P., & Webb, V. (2013). A cross-sectional study of paramedics' readiness for interprofessional learning and cooperation: results from five universities. *Nurse Educ. Today*, *33*(11), 1369–1375.

Williams, B., Brown, T., & Boyle, M. (2012). Construct validation of the readiness for interprofessional learning scale: A rasch and factor analysis. *Journal of Interprofessional Care*, *26*(4), 326-332.

World Health Organization (2008). *Integrating mental health into primary care. A global perspective*. Retrieved from http://www.who.int/mental_health/resources/mentalhealth_PHC_2008.pdf

World Health Organization. (2010). *Framework for action on IP education and collaborative practice.* Retrieved from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf

Wyld, K.L. (1981) Counselling in general practice: A review. *British Journal of Guidance & Counselling*, *9*(2), 129-141.

APPENDIX A

Readiness for InterProfessional Learning Scale Survey

Your specific responses to the questions on the survey will remain anonymous.

This survey is two pages long. This is the first page. When this page is complete, the survey is 50% done!

In many health science programs, students have the opportunity to work with other students from different health disciplines (medicine, nursing, pharmacy, rehabilitation medicine, etc.). In your training as a counsellor, you may or may not have had the opportunity to participate in similar opportunities.

1. **What is your age?**

- 17-22
- 23-26
- 27-30
- 31-35
- 36-40
- 40+

2. **What is your gender?**

- Male
- Female
- Other

3. **What educational institution are you attending/did you recently attend?**

- University of Lethbridge
- Memorial University of Newfoundland
- University of Alberta

4. **In which graduate-level program are you currently enrolled?**

- Masters
- Doctoral
- Post-Doctoral

5. **What year of program are you enrolled in?**

- 1
- 2
- 3
- Graduated (not currently working as a counsellor)
- Graduated (currently working as a counsellor)

6. **Are you currently registered as any of the following:**

- Certified Canadian Counsellor
- Provisional Psychologist
- Registered Psychologist
- Registered Social Worker
- Registered Clinical Social Worker
- Marriage and Family Therapist
- Other, please specify… _____
- N/A

7. **Do you have any previous interprofessional experiences?**

- Yes
- No

8. **Have you ever worked in an interprofessional environment?**

- Yes
- No

Please note, as a student of counselling psychology you are considered part of the "health care" field (Mental Health is an important part of health!). Please excuse the survey's use of "patient" instead of "client."

9. **Using the rating system indicated below, how strongly would you agree or disagree with the following statements regarding shared learning activities among health sciences disciplines?**

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Learning with other students will help me become a more effective member of a health care team.	○	○	○	○	○
Patients would ultimately benefit if health care students worked together to solve patient problems.	○	○	○	○	○
Shared learning with other health care students will increase my ability to understand clinical problems.	○	○	○	○	○
Learning with health care students before qualification would improve relationships after qualification.	○	○	○	○	○
Communication skills should be learned with other health care students.	○	○	○	○	○
Shared learning will help me to think positively about other professionals.	○	○	○	○	○
For small group learning to work, students need to trust and respect each other.	○	○	○	○	○
Team-working skills are essential for all health care students to learn.	○	○	○	○	○

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Shared learning will help me to understand my own limitations.	○	○	○	○	○
I don't want to waste my time learning with other health care students.	○	○	○	○	○
It is not necessary for undergraduate health care students to learn together.	○	○	○	○	○
Clinical problem-solving skills can only be learned with students from my own department.	○	○	○	○	○
Shared learning with other health care students will help me to communicate better with patients and other professionals.	○	○	○	○	○
I would welcome the opportunity to work on small-group projects with other health care students.	○	○	○	○	○
Shared learning will help to clarify the nature of patient problems.	○	○	○	○	○
Shared learning before qualification will help me become a better team worker.	○	○	○	○	○
The function of nurses and therapists is mainly to provide support for doctors.	○	○	○	○	○
I'm not sure what my professional role will be.	○	○	○	○	○

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
I have to acquire much more knowledge and skills than other health care students.	○	○	○	○	○

10. **Overall, which of the following best describes your perception of the importance of interdisciplinary teamwork in the work of a counsellor:**

- ○ I don't see why counsellors would ever need to work with anyone except the clients.
- ○ Working with other professionals is against the most important part of counselling: confidentiality. Working with other professionals is unethical.
- ○ Counsellors need to consult with other professionals sometimes.
- ○ Working with other professionals is probably important but I don't really know what this would look like in counselling.
- ○ Working with other professionals is important and in the best interests of the client.
- ○ Other, please specify … _____

11. **If you are currently working as a counsellor, which of the following best describes the role of interdisciplinary teamwork in your work as a counsellor:**

- ○ I work independently. The only others in my practice are my clients.
- ○ I work with others in my practice, but only other counsellors.
- ○ I work with other health professionals in my practice, but only other mental health professionals.
- ○ I work with health professionals in my practice and find the teamwork seamless and supportive most of the time.
- ○ I work with health professionals in my practice and find the teamwork challenging, but rewarding.
- ○ I work with health professionals in my practice and find the teamwork challenging, frustrating, and a waste of time.
- ○ I work with health professionals in my practice and find the teamwork challenging and is more often harmful than helpful.
- ○ I should be working with other health professionals more closely, but I tend not to.

12. **Reflecting on your training in your program, what are the take away messages that you have perceived regarding interdisciplinary practice?**

APPENDIX B

Email to Students

As counselling educators, we would like to learn more about how counselling students (you!) think about working with other professionals (such as social workers, psychiatrists, physicians, nurses, etc.). Because working in teams with different professionals is common in many areas of health care, we would like to learn more about how important you perceive this teamwork to be in the area of counselling.

You are invited to participate in a 10-15 minute survey regarding your perceptions of interprofessional teamwork. To thank you for your time and thoughtfulness, you will be invited to enter a draw for an iPod touch!

Please click on the link below to review the brief information/consent letter and (if you agree to continue) complete the survey.

Collaborative Practice Survey: CLICK HERE http://fluidsurveys.com/surveys/nicole-2gb/consent-form/

Thanks in advance!

Nicole Kelly (thesis student), Memorial University of Newfoundland
Elaine Greidanus, University of Lethbridge
Greg Harris, Memorial University of Newfoundland
William Whelton, University of Alberta
Ellen Klaver (thesis student), University of Alberta

APPENDIX C

Information Letter and Consent Form: First Page of Survey Monkey

Project Title: Interprofessional education (IPE) opportunities and attitudes among counselling psychology students in Canada

Investigators
Elaine Greidanus, University of Lethbridge, (403) 329-2186
Greg Harris, Memorial University of Newfoundland, (709) 864-6925
William Whelton, University of Alberta, (780) 492-7979
Nicole Kelly, Memorial University of Newfoundland, x67nkk@mun.ca
Ellen Klaver, University of Alberta, eklaver@ualberta.ca

This research is being funded by the Faculty of Education, University of Lethbridge.

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the above researchers if you have any questions about the study or would like more information before you consent.

Background: Interprofessional education is becoming a critical component of education among healthcare students. In order to address the need for the development of interprofessional education among counseling psychology students, researchers at the University of Lethbridge, Memorial University of Newfoundland and University of Alberta have partnered to explore the perceptions of counselling students regarding interprofessional teamwork.
Though the body of literature on interprofessional teams is growing, little research focuses on counseling students' and their perceptions of interprofessional education. The current study looks to fill this gap in the literature. By gaining an understanding of students' perceptions towards interprofessional education, curriculum developers and educators are able to improve students' learning experiences and provide these experiences to the students at the appropriate point in the educational programs.

Objective: The objective of this study is to survey counselling students to determine their perceptions towards interprofessional education and team care.

Reporting of Results: Results of this survey will be analyzed and summarized to describe student's perceptions of the role of interprofessional teamwork in counselling psychology. These research findings will be presented at national and international conferences and published in peer reviewed journals. In addition, two thesis students are involved in the collection and analysis of the data and therefore their theses will be publically available at the QEII library and

the University of Alberta library. No personally identifying information will be included in any reports.

Procedure: The questionnaire is composed of two standardized scales including the Readiness for Interprofessional Learning Scale and the Student Stereotype Rating Scale, followed by some self-devised items to provide further depth on the information collected from the standardized scales. The survey will take 10-15 minutes to complete. You will not be asked to disclose your name in this survey. Submission of the survey implies your consent to participate in the research.

After completing as much of the survey as you choose to complete, you will be given the opportunity to enter a draw. Should you decide to enter the draw you will need to provide your phone number. This information is NOT linked to your survey results. The purpose of collecting this information is to enter your name into a draw to win an iPod Touch (approximate value $250; there is a one in one hundred chance of winning).

Due to ethical considerations, participants are not provided with any undue compensation or inducements, or coercion to research participants. If you would not otherwise choose to participate if the compensation was not offered, then you should decline.

The survey results will be collected via FluidSurveys, a Canadian survey provider, (www.FluidSurveys.com) and returned to the institutional researchers. The security of the data collected and transmitted to the researchers from FluidSurveys is ensured by FluidSurveys and any inadvertent limitations in the security of the data will not include any of your identifying information. FluidSurveys is compliant with Canadian privacy and accessibility standards and the data collected by FluidSurveys is hosted in Canada (https://fluidsurveys.com/about/privacy). In addition, as per FluidSurveys' Privacy and Security Options, the survey will be anonymous and user privacy information (such as IP address) will not be tracked.

Benefits and Risks: Although there may be no direct benefit to you for taking part in the survey, this study will help the researchers to determine the most appropriate approaches to providing interprofessional learning experiences. There are no anticipated risks to you by participating in this research. However, if you experience any anxiety from participating, you may withdraw from the study at any time and it is recommended that you contact further support appropriate to your institution which is provided below.
Privacy and Confidentiality: Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time prior to submitting the online survey form. Because the survey in anonymous and your name is not linked to the survey results, there is no way to remove your data from the study after you submit your responses.
Your participation is voluntary; you do not have to be a part of the study if you so choose. Participation or non-participation will in no way affect your status or grade in your program of study. Should you decide to take part, you have the right to refuse to answer any questions within the survey.
All the information will be saved on a secure computer. You will not be identified in the database. The database will be stored on a password protected computer, in a password protected file, and on a secure server for a minimum of 5 years and then destroyed.

Voluntary Participation: Participation is completely free and anonymous. The choice to participate or not participate will never be known by the researchers and no identifying information is required from the participants.

Freedom to Withdraw: Participants have the right to withdraw from the study by not completing the survey. If the participant chooses to withdraw from the study prior to completing the survey, anonymity of the data is preserved. Due to the anonymous nature of the survey, it is not possible to delete individual student responses from the dataset once the online survey is submitted.

Contacts:
University of Lethbridge: If you have any questions about this study or if you wish to withdraw from the study, please contact Dr. Elaine Greidanus at (403) 329-2186. If you have any concerns about how this study is being carried out, please contact the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge (403-329-2425).

University of Alberta: If you have any questions about this study or if you wish to withdraw from the study, please contact Dr. William Whelton at (780) 492-7979. The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Memorial University of Newfoundland: The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

By clicking the "submit" button, you are consenting to participate in this survey.

APPENDIX D

IPod Draw: Second Page of Survey Monkey

You are invited to participate in a 10-15 minute survey regarding your perceptions of interprofessional teamwork. To thank you for your time and thoughtfulness, you will be invited to enter a draw for an iPod touch!

If you would like to enter the draw, please provide your phone number below. This information is NOT linked to your survey results. If you do not want to be considered in the draw, just click "submit" on this page to begin the survey.

Please Enter Your Phone Number (including area code): _____

Submit

APPENDIX E

Memorial University Ethics Approval Letter

MEMORIAL UNIVERSITY

Interdisciplinary Committee on Ethics in Human Research (ICEHR)

Research Grant and Contract Services
St. John's, NL Canada A1C 5S7
Tel: 709 864 2561 Fax: 709 864 4612
www.mun.ca/research

ICEHR Number:	**20151597-ED**
Approval Period:	February 27, 2015 – February 29, 2016
Funding Source:	N/A
Responsible Faculty:	Dr. Greg Harris Faculty of Education
Title of Project:	*Interprofessional education (IPE) opportunities and attitudes among counselling psychology students in Canada*

February 27, 2015

Ms. Nicole Kelly
Faculty of Education
Memorial University of Newfoundland

Dear Ms. Kelly:

Thank you for your email correspondence of February 21, 2015 addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) concerning the above-named research project.

The ICEHR has re-examined the proposal with the clarification and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* to February 29, 2016.

If you need to make changes during the course of the project, which may raise ethical concerns, please forward an amendment request form with a description of these changes to icehr@mun.ca for the Committee's consideration.

The *TCPS2* requires that you submit an annual update form to the ICEHR before February 29, 2016. If you plan to continue the project, you need to request renewal of your ethics clearance, and include a brief summary on the progress of your research. When the project no longer requires contact with human participants, is completed and/or terminated, you need to provide the annual update form with a final brief summary, and your file will be closed.

The annual update form and amendment request form are on the ICEHR website at http://www.mun.ca/research/ethics/humans/icehr/applications/.

We wish you success with your research.

Yours sincerely,

Gail Wideman

Gail Wideman, Ph.D.
Vice-Chair, Interdisciplinary Committee on Ethics in Human Research

GW/lw

copy: Supervisor – Dr. Greg Harris, Faculty of Education
Associate Dean, Graduate Programs, Faculty of Education