Development of Client-Centredness: Perceptions of Interprofessional Healthcare Students

by

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Abstract

Statement of the Problem

It is essential to develop client-centred knowledge, skills, attitudes and values as healthcare providers strive to participate in interprofessional (IP) collaborative practice and provide high-quality health care (Canadian Interprofessional Health Collaborative, 2010). Limited research exists to help educators understand how to support healthcare student development of client-centredness. This study aimed to advance an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students.

Methods

In this interpretive description study, six students from various professional health disciplines engaged in a series of three focus groups over the course of five months to explore students' classroom and practice experiences with client-centredness. Focus groups were digitally audio-recorded and transcribed verbatim. Focus group data were inductively analysed using thematic analysis and findings were sent to participants for member-checking.

Results

This study revealed four themes which iteratively built upon each other. The themes were (a) scaffolding existing components of professional education programs form a base for client-centred development, (b) an evolutionary process to internalizing client-centredness, (c) IP discussion with stories enhances client-centred development, and (d) a reflective process to developing client-centredness.

Conclusions

Reflective healthcare students benefit from in-person, open discussion opportunities to learn with, from and about each other in an interprofessional education (IPE) context as they

internalize client-centredness and move beyond the knowledge and skill-based foundations provided to them by their individual professional education programs. Knowledge gained in this study may help academic- and clinical-educators to better understand the client-centred development process so they can support graduates entering the health system as enhanced IP client-centred care providers.

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1.0 Introduction

1.1 Statement of the Problem and Significance of the Study

Client-centredness is a professional value (Currie et al., 2015; Ripat, Wener, Dobinson, & Yamamoto, 2014) that is being encouraged among healthcare providers working in the context of interprofessional (IP) teams (Canadian Interprofessional Health Collaborative [CIHC], 2010) as a way of ensuring provision of quality healthcare (Accreditation Canada, 2014). Promoting care that is client-centred is a response to an increasing demand for "a more humanistic and holistic approach to health care, where the individual who needs care is viewed and respected as a whole person with multidimensional needs" (World Health Organization (WHO): Western Pacific Region, 2007, p.4). In Canada, the National Interprofessional Competency Framework (NIPCF) states that "interprofessional collaboration is the process of developing and maintaining effective interprofessional working relationships with learners, practitioners, patients/clients/families and communities to enable optimal health outcomes" (CIHC, 2010, p.8). The NIPCF described client-centred care as one of six competencies that are practice-focused and require "development and demonstration of the knowledge, skills, attitudes, values and judgements involved in practicing collaboratively" (CIHC, 2010, p.8). Client-centred care was described in the NIPCF as including clients, families and communities as partners in the healthcare team. The NIPCF further described client-centred care as the respectful sharing of information in a way that supports discussion and client participation in decision-making. Recognizing the client as an expert who helps to plan and carry out individualized health service delivery is necessary in client-centred care models of practice (CHIC, 2010).

With the recent focus on client-centred services (Accreditation Canada, 2014) and the provision of care that is built upon development of client-centred "knowledge, skills, attitudes,

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values and judgements" (CIHC, 2010, p.8), there has been an evolving awareness that teaching and learning to be client-centred is a necessary part of the academic preparation of pre-licensure healthcare students. Interprofessional education (IPE) has been described as "occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care" (Centre for the Advancement of Interprofessional Education [CAIPE], 2019, p.1). Educators involved in IPE at the University of Manitoba (U of M) strive to expose students in the Rady Faculty of Health Sciences (Rady FHS) to the six competency domains of the NIPCF (CIHC, 2010), one of which is client-centred care (Rady FHS, U of M, 2017). However, professional values that guide healthcare practices, such as client-centredness, are difficult to explicitly teach and evaluate. Furthermore, limited literature was located regarding the clientcentred development process of pre-licensure healthcare students. A recent literature search identified a lack of research studies that focused specifically on the development of clientcentredness in healthcare students within an IPE context. However, two uniprofessional qualitative studies were identified (Currie et al., 2015; Ripat, Wener, & Dobinson, 2013) that provide some emerging information about the development of client-centredness. Gaining the perspective of pre-licensure healthcare students on client-centred development is needed to increase depth of understanding about how healthcare students work together to develop a shared professional value in the context of IPE.

Teaching skills for client-centred practice and promoting development of professional identity may be enhanced using teaching strategies that help students to connect emotionally and reflectively with the learning content. For example, Wener et al. (2015) identified that client-centred counselling skills can be enhanced when tools to stimulate reflection are utilized by student occupational therapists. In another study, researchers found that digital storytelling used

as a teaching strategy with student nurses provided an emotional experience which promoted reflection and contributed to student nurses' developing sense of professional identity (Christiansen, 2011).

Although increasing provision of a client-centred approach to practice will ultimately contribute to the overall health of clients, understanding how pre-licensure healthcare students define and develop client-centredness within the context of an IPE experience, and the teaching methods that may best facilitate this development has not been the focus of research thus far. Advancing understanding from the perspectives of pre-licensure healthcare students will help educators to choose the most effective tools and strategies to stimulate student development of client-centredness. As healthcare students enter post-licensure practice with more fully developed client-centred professional identities, healthcare service delivery systems and ultimately the care of clients will be enhanced.

1.2 Purpose of the Study

Client-centredness is a professional value, belief and attitude that guides IP healthcare practice, in which healthcare professionals view their clients in holistic ways and believe their clients to be knowledgeable, active partners in the care relationship. The focus of this research was on pre-licensure healthcare student perspective.

Thus, the purpose of this qualitative study was to advance an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students within and IPE context. The research objectives were: (a) to explore how pre-licensure healthcare students engaged in an IPE experience describe client-centredness and how they perceive client-centredness fits within their professional identity, theories and values; (b) to gain an understanding of how pre-licensure healthcare students learn about client-centredness; (c) to

understand how pre-licensure healthcare students learn with, from, and about each other when developing client-centredness; and (d) to examine factors that contribute to the development of client-centredness in pre-licensure healthcare students by using digital stories as a catalyst for discussion and by asking students to reflect on practice experiences in their academic preparation.

1.3 Research Questions

This research study aimed to answer the following central research question: How does client-centredness develop in pre-licensure healthcare students? Associated sub-questions of this research study were as follows:

- How do pre-licensure students from various health professions describe clientcentredness?
- How do pre-licensure students from various health professions learn about client-centredness?
- What factors have contributed to the development of client-centredness in pre-licensure students from various health professions?
- How does client-centredness fit within professional theory, values and identity for prelicensure students from various health professions?
- How do pre-licensure students from various health professions discuss client-centredness after watching/listening to a client's digital story?
- How do pre-licensure students from various health professions learn with, from, and about each other when discussing client-centredness?

1.4 Context of the Study

1.4.1 Defining the client. The individual person, family, group, community, or population who together with healthcare providers is participating in healthcare services, may be defined using the term, client (Townsend & Polatajko, 2013). The context of care provision may influence whether the term client, patient, or person is used to identify the healthcare service recipient (Hughes, Bamford & May, 2008). For the purposes of this study, the terms client, client-centred and client-centredness will be used, with the understanding that knowledge will be drawn from literature that makes use of other synonymous terminology such as described above.

1.4.2 Concepts of client-centredness. A consistent definition of client-centredness does not appear in the healthcare literature, however, there is consistency in core concepts of client-centredness which come from client perspectives, clinician viewpoints, and from institutional lenses. Client-centredness is a professional value, belief, and attitude that may be demonstrated in the skills, knowledge, and behaviours of healthcare providers as they participate in client-centred practice within the context of a care environment (CIHC, 2010; Ripat, 2017). The client-centred healthcare provider recognizes, values, and respects each recipient of healthcare as a unique, knowledgeable, experienced person with a distinct context (Canadian Association of Occupational Therapists [CAOT], 2015; Corring & Cook, 1999; Phoenix & Vanderkaay, 2015). A client-centred approach may include, demonstration of skilled communication used to engage clients as active partners, and strategies used to balance power to allow for shared decision-making and collaborative goal-setting (CAOT, 2015; Phoenix & Vanderkaay, 2015; Sumsion, 2005; Thomson & Doody, 2010). Client-centred care is comprehensive across a care continuum (Canadian Medical Association, 2010; Canadian Nurses Association, 2015) and includes

carefully balancing resources to allow healthcare needs of a population to be met on an ongoing basis (Green et al., 2014).

1.4.3 Client-centredness in healthcare education. The amount of IP collaboration that is required for each client at any given point in time differs depending on the complexity of the situation (CIHC, 2010). There is recognition that collaboration of a team is required to help address the social determinants of health (CIHC, 2010), and IP collaborative practice may be viewed as a step toward better meeting holistic health needs (WHO, 2010). Most healthcare professions identify collaboration as an essential competency for the provision of health services. For example, in Canada, collaborator has been identified as a role of physicians (Royal College of Physicians and Surgeons of Canada, 2019), occupational therapists (Canadian Association of Occupational Therapists, 2012) and pharmacists (National Association of Pharmacy Regulatory Authorities, 2014). Learning to collaborate begins at the pre-licensure stage of healthcare education, where IPE involves students from various healthcare professions learning about, from and with each other (CAIPE, 2019; WHO, 2010).

In Canada, the CIHC brings forward the common belief of members, ranging from health organizations to clinicians, and from educators to students, that "interprofessional education and collaborative patient-centred practice are key to building effective health teams and improving the experience and outcomes of patients" (2010, p.2). Client-centredness is a core-competency of IP collaboration (IPEC Expert Panel, 2011), and development of curriculum and approaches to learning are guided by core competencies so that healthcare students develop the attitudes, values, knowledge and skills for future collaborative client-centred practice (IPEC Expert Panel, 2011; WHO, 2010). The Office of IP Collaboration at the U of M has adopted the NIPCF (Rady FHS, U of M, 2016) which was developed by the CIHC to help with the process of learning,

application and integration of relevant competencies for IP healthcare practice (CIHC, 2010). Fifty-two IP Collaborative Care student cohorts joined together for the first time in September 2016 to begin their learning journey through the IP Collaboration curriculum (Rady FHS, U of M, 2016), and that group concluded their two-year longitudinal IP learning activities in April 2018 (Rady FHS, U of M, 2018). Competencies of the NIPCF, including client-centred care (CIHC, 2010) are being taught to the cohorts of IP students from nine healthcare education programs in the U of M Office of IP Collaboration, with further cohorts of students starting into their two-year IP journey each year (Rady FHS, U of M, 2016, Rady FHS, U of M, 2018).

In this study, local (Rady FHS, U of M, 2017), national (CIHC, 2010) and international (WHO, 2010; WHO: Western Pacific Region, 2007) literature that has identified healthcare student development of client-centredness at the pre-licensure stage of academic preparation was deemed important. Deliberate provision of curricular opportunities for IP collaboration may encourage development of client-centredness as a core professional value. However, study of development of client-centredness within healthcare student groups engaged in IPE experiences is lacking in research literature. Furthermore, there is a lack of literature to describe the most effective methods to promote client-centred development in pre-licensure healthcare students. Educators involved in the IP Collaboration curriculum at the U of M, Rady FHS may incorporate results of this study into future IP student curricular experiences.

1.4.4 Development of client digital stories as educational tools. As the student researcher and her study advisor explored the need for a study to advance understanding of the development of client-centredness from the perspective of pre-licensure healthcare students, digital stories were considered as a potential educational tool. Digital stories deliver a deep and emotional account of an individual's health experience (Christiansen, 2011; Gubrium, 2009;

Levett-Jones, Bowen, & Morris, 2015) and have been proposed as a powerful and novel tool for use in healthcare education (Christiansen, 2011).

The student researcher and two of her study advisors (Ripat and Wener) applied for a grant (*Digital Stories as Educational Tools for Development of Client-Centredness*, College of Rehabilitation Sciences 2017 Endowment Fund, U of M) to develop three digital stories that could be used for educational purposes. Clients were recruited to each tell a story of their personal health journey to be developed into the form of a digital story. Three digital stories were developed over the course of a three-day digital storytelling workshop. The stories included the personal health journeys of an individual with multiple sclerosis, an individual who previously had a stroke, and an individual who has had a lifelong journey with depression and anxiety. The developed digital stories were used to stimulate discussion during the data collection phase of the completed study. Further background information about digital stories will be explored below as part of the literature review.

1.4.5 Organization and structure of this thesis. This thesis is organized as manuscript style with a single manuscript embedded in the thesis. Chapter 1 offered the introduction to this thesis, outlining the study significance, purpose, and context. Chapter 2 provides an overall literature review to explore what is known thus far about the development of client-centredness, to explore methodologies and methods for design of this study, and to consider teaching and learning strategies that may contribute to client-centred development in pre-licensure healthcare students. The third chapter outlines methods. Chapter 4 provides a transition to the manuscript that is presented in chapter 5 as well as an introduction to the remaining chapters of the entire thesis. The fifth chapter is a manuscript titled, *Discussion among Reflective Interprofessional Healthcare Students Promotes Development of Client-Centredness*; results of this thesis are

presented within this manuscript. Manuscript references are outlined at the conclusion of chapter 5. Redundancies will be noted between chapter 5 and the introduction, literature review, and methods sections of the thesis because the manuscript has been developed as a stand-alone document that can be easily prepared for future publication. Chapter 6 offers a short discussion on use of digital stories with pre-licensure healthcare students within the context of developing client-centredness. Chapter 7 comprises of a discussion and overall conclusions to outline the contributions this thesis has made to the research area. References for the entire thesis are found at the end of the thesis followed by appendices of the thesis.

2.0 Literature Review

The intent of this literature review was to explore what is currently known about the development of client-centredness within an IPE context. A second intent was to explore methodologies, methods and protocol considerations during the proposal phase of this thesis research. Finally, the student researcher explored teaching and learning strategies that may facilitate the development of client-centredness within pre-licensure healthcare students.

2.1 Method of Review

A literature review was completed using the databases CINAHL, PsycINFO, and MEDLINE (Ovid) which provides access to the databases MEDLINE and EMBASE. Scopus was used later in the search process for more focused searching of peer-reviewed literature. Major concept areas searched in the literature were (a) interprofessional, (b) student, (c) learning/developing, and (d) client-centred/client-centredness. The only consistently applied limit in the search process was the selection of literature written in English, to the exclusion of other languages. Web searching was completed to obtain relevant information from professional organizations, educational institutions, as well as government sites and policy documents. Searching was completed using a wide range of synonyms for major concept areas as well as various spelling options. Searching was expanded using forward tracking of citations and hand searching by review of reference lists from key articles. The literature search was iterative and exploratory rather than exhaustive.

2.2 Development of Client-Centredness

2.2.1 Client-centredness in healthcare student populations. Multiple healthcare disciplines identify client-centredness as a professional value and thus, client-centred development is encouraged to varying degrees in pre-licensure healthcare students. Literature

review revealed uniprofessional studies in which students supported the view that client-centredness is a core professional value. From the uniprofessional viewpoint, client-centredness was considered foundational to the occupational therapy (OT) profession by student occupational therapists (Ripat et al., 2013), and similarly, nursing students defined client-centred care as a core value in their profession (Currie et al., 2015).

Studies with IP student groups have implicitly noted the importance of client-centred concepts in healthcare education while aiming to explore components of student learning within IP client-centred care models. For example, nursing and social work students were brought together in a study to explore the development of understanding of the meaning of caring (Chan, Mok, Po-ying, & Man-chun, 2009). In that study, authors reported how discussion and deep thinking about caring, during the IP seminars of their study, led to a more holistic view of the client and an IP perspective of caring (Chan et al., 2009). Other studies have examined benefits of IP learning models that support client-centredness. For example, Anderson, Smith, and Thorpe (2010) brought medical and social work students together and found that students used discussion to expand knowledge of caring for people with disabilities, while reflecting on attitudes and culture in healthcare practice within a client-centred IP learning model. While there is evidence in the literature to support an explicit uniprofessional and implicit IP educational focus on development of client-centredness, searching the literature revealed a dearth of studies specifically aimed at exploring healthcare student perspective on development of clientcentredness within IPE experiences.

2.2.2 Development of client-centredness is complex. Learning about client-centredness and becoming a client-centred healthcare provider is a complex process (Ripat et al., 2014).
Students and licensed clinicians are taught client-centred skills and knowledge that can be

incorporated into healthcare practices. However, understanding how client-centred theory translates into practices or what it means to have client-centred beliefs and values has not been fully explored.

Client-centred knowledge and skill development is thought to begin during pre-licensure academic preparation with continued development in post-graduate professional practice (Ripat et al., 2013; Ripat et al., 2014). Some studies have focused on how students develop clientcentred knowledge and skill, while other studies have focused more specifically on whether training efforts or specific tools may support client-centred skill acquisition. Currie et al.'s (2015) exploratory study of first year nursing students in the United Kingdom used qualitative thematic analysis to explore how student nurses learn about client-centred care and how they attain client-centred skills and knowledge. Authors discovered that nursing students learned about client-centred care by "stepping in" to learn directly through interaction with clients, and by "stepping back" to learn from a distance by observing care, writing about care, or reading charts and care plans (Currie et al., 2015, p.241). In contrast to Currie et al.'s aim to broadly understand how student-nurses learn about client-centred care, Wener et al.'s (2015) study was focused specifically on the impact of a teaching tool for client-centred counselling skill development. The authors of that study of OT students found that use of a specified rating tool that gathers client feedback about counselling sessions helped students to utilize a client-centred approach in their counselling skill application (Wener et al., 2015).

Researchers continue seeking to understand how to enhance the client-centred approach used by clinicians once they enter post-graduate practice. A systematic review was conducted by Dwamena et al. (2012) that included 43 randomized trials examining the effects of interventions aimed at promoting clinical consultations that are client-centred (most studies focused on

primary care physicians or community/outpatient nurses). Findings of the systematic review identified that skills for client-centred practice were enhanced through training efforts directed at licensed healthcare professionals (Dwamena et al., 2012). The above study provides evidence that a client-centred approach is encouraged in post-graduate practice (Dwamena et al., 2012), and there is evidence in the literature that researchers are seeking to better understand student client-centred skill acquisition (Wener et al., 2015). However, the above noted studies do not provide healthcare student perspective on the complexities of the full process of healthcare student development of client-centredness in the context of IPE experiences.

Researchers have aimed to understand the complexity of development of clientcentredness in OT students. Ripat et al. (2013) used a grounded theory approach to increase understanding of the educational experiences of student occupational therapists that contributed to development of client-centredness. Focused on the emergent process of developing clientcentredness through various stages of educational and career development, researchers collected focus group data from three cohorts (n=29) of a two-year Masters of OT programme in Canada (6 months into first year, 6 months into second year, and <1-year post-licensure practice) (2013). Through inductive data analysis, researchers found that students identified multiple influences on their developing client-centred identity (2013). Students reflected on the importance of identifying the client while considering power dynamics and relationships between client, family, team and organization. Students became aware of a discrepancy between what they were taught about client-centredness versus the application of client-centredness in professional practice. Further data analysis of Ripat et al.'s (2013) study was completed to better understand the theme of "internalizing client-centredness" (Ripat et al., 2014, p.4), and authors concluded that as client-centredness is developed, OT students first identify their profession as clientcentred and later identify themselves as client-centred clinicians. Ripat et al. (2014) made a powerful link between client-centredness and professional identity development, stating that "ultimately, client-centredness became part of the participants' professional identity" (p. 7). The link made between development of client-centredness as a component of professional identity (Ripat et al., 2013; Ripat et al., 2014) may be useful when seeking to understand complex developmental processes; therefore, studies that consider the development of other areas of professional identity will briefly be explored below.

2.2.3 Client-centredness as a component of professional identity. Values, beliefs and attitudes are evident in the knowledge, actions, skills, and behaviours of healthcare providers as they exhibit their professional identity within practice. Through processes of teaching, role modeling and socialization, professional values are instilled in healthcare students, enabling students to graduate with the ability to successfully carry out their roles and responsibilities in practice. The processes involved in developing various components of healthcare provider identity are not entirely understood and previous authors have called attention to improving understanding of the dual identity of healthcare students, namely uniprofessional and IP identities (Khalili et al., 2013). Client-centredness is one of many components of healthcare provider identity that is underpinning the provision of health services. Competencies such as caring (Chan et al., 2009), IP collaboration and team skills (CIHC, 2010; Casimiro, Hall, Kuziemsky, O'Connor, & Varpio, 2015; Darlow et al., 2015), leadership (CIHC, 2010; Gordon, Rees, Ker, & Cleland, 2015), emotional competence (Wilson & Carryer, 2008), and communication (CIHC, 2010; Kent, Drysdale, Martin, & Keating, 2014; Wener et al., 2015) all contribute to healthcare provider professional identity. Understanding how these competencies

develop and contribute to IP identity can provide some indication of how client-centredness develops in pre-licensure healthcare students as they engage in IPE experiences.

Developing components of healthcare provider professional identity have been explored in prior research where authors have underscored the complexity of defining, teaching and evaluating professional identity development. For example, Byszewski, Gill, & Lochnan (2015) identified and compared professionalism as a competency taught in Canadian medical schools by exploring professionalism structures, teaching methods, student evaluations, and strategies for ensuring enactment of professionalism. Those authors found that explicit instructional methods such as lectures and group work were utilized to encourage professionalism early in academic preparation, however teaching became more implicit during practice experience portions of education (Byszewski et al., 2015). Role modeling during practice experience was highlighted by those authors as an informal but invaluable professionalism teaching method, but Byszewski et al. reported that it is difficult to capture and accurately assess exactly how role modeling impacts professionalism.

In other studies, developing components of professional identity have been explored with recognition that professional values, beliefs and attitudes are difficult to define and require multilayered teaching and assessment strategies. For example, Khomeiran, Ekta, Kiger, and Ahmadi (2006) explored nurses' perceptions of the influences on professional competence development and identified that direct experience was the key factor influencing development of that construct of nursing identity. Six categories that influence development of professional competence were identified by those researchers, including personal characteristics, motivation, theoretical knowledge, experiences, opportunities, and environment (Khomeiran et al., 2006).

Finally, studies have emphasized the importance of providing students with opportunities to practice skills and receive feedback from educators to promote development of professional identity. For example, in an exploratory qualitative study with nurse educators, researchers aimed to increase understanding of the challenges of assessing development of emotional competence in student nurses (Wilson & Carryer, 2008). Results of that study suggested that clearly defining emotional competence is difficult, but that educators should expect emotional competence from students while simultaneously acting as emotionally competent role models during student nurse education provision (Wilson & Carryer, 2008).

Selection of research design and protocols to best capture the complexity of seeking to understand development of client-centredness in healthcare students was guided by some of the above noted prior research which highlighted the difficulty with defining, teaching and evaluating components of professional identity development. Khomeiran et al.'s (2006) study suggests that students must begin with willingness to learn theory and skills before they adopt a professional attitude. Multiple authors have suggested that students must be provided with the right environment, opportunity and experience to demonstrate professional behaviour and attitudes consistent with their professional identity (Byszewski et al., 2015; Khomeiran et al., 2006; Wilson & Carryer, 2008).

2.2.4 Summary of what is known thus far about development of client-centredness.

Overall, development of client-centredness begins during pre-licensure academic preparation and continues into post-graduate professional practice as healthcare students become client-centred healthcare providers. The process of "internalizing client-centredness" over the course of academic preparation and into early professional practice for occupational therapists has been found to include first identifying the profession as client-centred, then seeking deeper

understanding about the professional competency, and finally, defining oneself as a client-centred healthcare provider (Ripat et al., 2014, p. 4). Currie et al. (2015) highlighted that early in academic preparation, nursing students developed an awareness of "concepts, principles and language associated with person-centred care", and those authors recommended that educators encourage nursing students to begin application of a client-centred focus to clinical practice (p. 243). While a study by Chan et al. (2009) focused on developing understanding of the meaning of caring, that study also underscored the idea that during the development of professional identity, learning begins with acquisition of knowledge and skills then progresses to "placing much-needed effort on 'how to be' while caring for patients" (p. 2664). A summary of what is known thus far about development of client-centredness is provided below in *Figure 1*.

Figure 1. Development of client-centredness as surmised from the literature.



2.3 Literature-based Considerations when Designing this Research Study

2.3.1 Developing client-centredness through practice experiences. Healthcare education programs use a variety of methods to create real-life opportunities for students to work

with clients and develop their skills for practice. Within the various healthcare disciplines, practice experiences such as fieldwork, placement, clinical rotation or practicum occur under the supervision of licensed healthcare providers. While pre-licensure healthcare students can develop client-centred knowledge through a variety of classroom-based curricular activities, learning to provide care using a client-centred approach requires practice experiences.

Prior research was reviewed to help determine the most effective means of incorporating practice experience into the study design of this thesis research. In the design of some studies, research participants have been required to participate in practices experiences and then reflect on those experiences during data collection phases of the study. For example, Currie et al. (2015) collected practice-based learning reports from nursing students and students were additionally asked during focus groups to reflect upon their most recent practice experience. Those authors concluded that early practice experiences helped students to learn about client-centred care through observation, reading and writing, and that students who more actively engaged with clients during practice experiences were subsequently able to demonstrate increased insight into the concepts of client-centred care (Currie et al., 2015). Though not focused specifically on development of client-centredness, studies within IPE have also required research participants to partake in practice experiences to determine learning outcomes of such participation. For example, an eleven-hour IPE programme including a community visit to a client (as a practice experience) was completed over a four-week period as researchers aimed to evaluate change in student attitudes toward IP learning and teams (Darlow et al., 2015). Researchers concluded that participation in the practice experience in IP groups increased student understanding of the client's perspective on their health condition and the IP programme prompted the students to discuss how IP collaboration may lead to improved overall care.

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Reflection upon practice experience was explored as a means of indirectly incorporating practice experience into this thesis study design. Some researchers have not explicitly required research participants to partake in practice experiences as part of the study procedure, but during data collection have asked participants to reflect upon practice experiences. For example, in Ripat et al.'s (2013) study on OT student development of client-centredness, authors used semistructured focus groups that included questions about practice experiences. Through the process of asking participants to reflect upon their practice experience portions of academic preparation, the discussion generated in a focus group provided a forum for assessment of client-centred development. Gordon et al. (2015) combined focus group and interview data from a large sample of medial trainees across four Health Boards in the United Kingdom in order to explore experiences of medical students within the IP healthcare environment. While Gordon et al. (2015) did not focus on the development of client-centredness, their study did draw out perceptions of participants about their practice experiences in IP healthcare settings, as the researchers aimed to better understand how the students construct their identities as leaders and followers in the IP healthcare environment.

In summary, healthcare education places students in environments where they will have the chance to practice skills including enactment of client-centredness, and as the student researcher and her study advisor designed this thesis research, the studies outlined above served as examples of ways to collect data regarding the knowledge students gain during practice experiences. Qualitative methods of data collection allow knowledge to be gained from research participants about the difficult to standardize and capture implicit learning that occurs during practice experiences. Focus groups provide an opportunity for healthcare students to learn with,

from, and about each other as the research participants reflect upon the learning that occurs during the practice experience portions of their academic preparation.

2.3.2 Reflection to promote development of client-centredness. Reflection is used as a teaching tool in healthcare education (Edwards, 2017) and may be part of the lifelong learning process of healthcare providers (Nguyen, Fernandez, Karsenti, & Charlin, 2014; Rady FHS, U of M, 2019). Reflection is a thinking process that is attentive and critical with an exploratory and iterative nature (Nguyen et al., 2014). Reflection encourages students to connect past and present experiences to guide future experiences (Edwards, 2017). Edwards expanded upon "reflectionin-action" (Schön, 1983) and advocated for a reflective process that has four dimensions, namely "reflection-before, reflection-in, reflection-on, and reflection-beyond action" (2017, p.1). As care providers reflect beyond care, they increase self-awareness which promotes transformative learning (Edwards, 2017). Reflection is triggered by experiences and influenced by contextual factors such as timing and setting (Nguyen et al., 2014). Reflection is used for a variety of purposes by multiple healthcare disciplines (Hickson, 2011; Kuennen, 2015; Nguyen et al., 2014), for example, as a strategy to promote application of a client-centred approach to practice among occupational therapists (Sumsion & Law, 2006; Wilkins, Pollock, Rochon, & Law, 2001).

In healthcare education, reflection may be used as a method of encouraging students to connect theory to practice (Crookes, Crookes, & Walsh, 2013). Integration of theory and practice leading to the development of professional identity has been demonstrated to occur throughout the educational path of OT (Ripat et al., 2014) and nursing (Christiansen, 2011) students. A study by Adamson and Dewar (2015) provided an example of how reflection has been used in prior research to help students connect theory to practice. They reported on a portion of a three-

year action research project in the United Kingdom where nursing students were expected to complete online written reflection exercises to help connect theory of compassionate care to practice. Students were encouraged to write about their experiences of compassionate care and about their emotional reactions to online podcast stories of compassionate care. Furthermore, students were asked to reflect on how their own beliefs, values and attitudes may have influenced their hopes for future compassionate care provision. Those authors found that the combination of podcast stories along with facilitated online discussion acted as effective catalysts for reflection (2015).

Various teaching tools and strategies have been used to encourage reflection in healthcare education and research. Wener et al. (2015) used a rating scale for counselling sessions to stimulate student reflection. Adamson and Dewar (2015) used stories in the form of podcasts to stimulate reflection. Darlow et al. (2015) encouraged reflection through facilitated discussion in IP groups (students in dietetics, medicine, physiotherapy, and radiation therapy) and reflection was further encouraged when the groups were asked to prepare a presentation focused on the client perspective, as those researchers assessed change in student attitudes toward IP learning and teams. Practice-based learning logs were maintained by student nurses and collected after three weeks of practice experience during a research study by Currie et al. (2015). Reflection was stimulated in those learning logs which served as a data source for qualitative analysis in the investigation of how, and what, first year nursing students learn about client-centred care (Currie et al., 2015). Focus groups are a common source of data in qualitative studies and have served as a means of stimulating reflection (Currie et al., 2015, Gordon et al., 2015; Ripat et al., 2013).

occupational therapists, focus group participants were asked to reflect upon their client-centred practice experiences.

Researchers have found that educational tools which encourage reflection enhance development of knowledge (Chan et al., 2009), skills and behaviours (Wener et al., 2015) and contribute to developing professional identity (Christiansen, 2011) and therefore reflection was incorporated into this thesis study design. Chan et al.'s (2009) research demonstrated that reflecting on personal beliefs helped students in nursing and social work to understand the meaning of caring more extensively. Wener et al. (2015) demonstrated that use of a tool to stimulate reflection helped OT students to increase comfort with reflecting on their skills for enacting client-centred counselling sessions. Finally, Christiansen (2011) found that providing students time to reflect on the emotional experience of a digital story used as an educational tool helped nursing students to understand clients in more holistic ways and students gained insight into their own developing professional identity as client-centred clinicians.

Through a process of reflection, healthcare students can deliberately attend to their thoughts, actions and emotions in response to their experiences which may encourage development of a client-centred professional identity. Theory may be integrated into practice through timely reflection opportunities that are supported by healthcare educators. Ripat et al. (2014) recommended that curricular opportunities "promote intentional reflection on students" own client-centred development/changing perspective" to encourage "defining self as a client-centred practitioner" (p.9). Ripat et al. (2014) provide an argument for reflective exercises that include clarification of values, client-centred clinical reasoning, and ongoing opportunities to define and explore client-centredness. While it is unclear if encouraging reflection will influence

student development of client-centredness during an IPE group experience, there was sufficient evidence for including reflection in this thesis study design.

2.3.3 Storytelling to promote emotional engagement and to stimulate reflection.

Storytelling is one teaching strategy used with healthcare students and therefore storytelling was explored to consider how it may be incorporated into this thesis study. When considering client-centredness as a value, belief, and attitude that healthcare students internalize as part of professional identity (Ripat et al., 2014) the following statement by Haigh and Hardy (2011) is of relevance, "It is clear that the use of stories and storytelling in wider educational contexts has clear benefits in inculcating the tacit values of a profession into an apprentice body but also promotes group identity within student groupings" (p.409).

Storytelling as an educational teaching tool used with healthcare students has taken several forms, such as students learning directly from clients who tell their health stories (Anderson et al., 2010; Brewer & Stewart-Wynne, 2013; Gidman, 2013), from client experts (Brewer & Stewart-Wynne, 2013), from online story-based teaching tools (D'Alessandro, Lewis, & D'Alessandro, 2004; Fenton, 2014; Levett-Jones et al., 2015; Paliadelis et al., 2015; Terry, 2012), or through reflective journaling as means of students telling stories about practice experiences (Paliadelis & Wood, 2016). In a literature synthesis regarding teaching techniques for undergraduate nursing students which are meaningful and engaging, seven groups of teaching techniques were identified, namely: "technology and online; simulation; gaming; art; narratives; problem/context-based learning; and reflection" (Crookes et al., 2013, p.241). The findings of Crookes et al.'s literature review support the idea that art (including storytelling), narratives (which are a form of storytelling), and problem/context-based learning (which makes use of a

scenario or story) inspire engaged learning which stimulates student internalization of theory for future practice.

Storytelling as a means of communicating meaningful events and experiences through words, images and sounds (Haigh & Hardy, 2011) has been described as a powerful learning tool that promotes emotional engagement with content, evokes empathy, and stimulates reflection which has a positive impact on client-centred practice (Paliadelis et al., 2015). Listening to the stories of clients during practice experiences promoted understanding among student nurses, midwives, and social workers about the emotional and subjective experiences of clients, which in-turn increased learning and commitment to client-centredness (Gidman, 2013). A study was identified in which student nurses told their practice experience stories of compassionate care in a digital narrative format, and results indicated that students provided an emotional account of their experiences that helped them learn about provision of a family-focused, client-centred approach to compassionate care provision (Waugh & Donaldson, 2016). Storytelling, in various forms, stimulates deep learning, helps learners to emotionally engage with the content, and motivates learners to reflect, thus, using storytelling as a tool to facilitate development of client-centredness holds promise.

2.3.4 Digital storytelling. Searching the literature for use of storytelling in healthcare education, revealed descriptive papers about the value of digital storytelling (Gubrium, 2009; Lal, Donnelly, & Shin, 2015; Levett-Jones et al., 2015; Matthews, 2014; Stenhouse, Tait, Hardy, & Sumner, 2013; Terry, 2012) as well as research studies that paired digital stories with other teaching tools for development of student knowledge. A digital story is a short (3-5 minute) personal narrative made up of combinations of voice, audio, music, still images, text and short video clips that deliver a deep, and often emotional account of an experience (Christiansen,

2011; Gubrium, 2009; Levett-Jones et al., 2015). Authors have proposed that digital stores may support reflective practice in OT education (Lal et al., 2015), they may stimulate deep thinking and reflection in medical education (Anderson, Kinnair, Hardy, & Sumner, 2012), and they expose healthcare students to the emotional lived experience of clients to promote reflection and encourage client-centredness (Matthews, 2014). Digital stories have been used to tell the health story of a client online as part of a dynamic virtual community (Levett-Jones et al., 2015), as part of an online, interactive learning environment which students can self-navigate (D'Alessandro et al., 2004), and digital stories have been paired with online discussion with the individual that produced the digital story (Terry, 2012). While the above noted papers provide descriptive support for the use of digital stories to encourage emotional connection to content, stimulate reflection and encourage client-centredness, they do not provide research evidence to clearly link digital stories to development of client-centredness in healthcare students.

Digital stories have received attention as teaching tools with nursing (Christiansen, 2011; Fenton, 2014; Levett-Jones et al., 2015; Terry, 2012; Waugh & Donaldson, 2016), medical (D'Alessandro et al., 2004; Sandars & Murray, 2009), and allied health students (D'Alessandro et al., 2004) to help students learn about health conditions (D'Alessandro et al., 2004) and professional values (Levett-Jones et al., 2015; Waugh & Donaldson, 2016). For example, D'Alessandro et al. (2004) completed a pilot study where eight digital stories were used as teaching tools for IP students and professionals to learn about pediatric health conditions. The digital stories in that study were a component of an online patient simulation system that was being evaluated, and study results revealed that the digital stories were memorable and helped learners to focus on the person behind the story rather than focusing primarily on the health condition (D'Alessandro et al., 2004). Other researchers have used digital stories as part of an

online learning platform to promote learning about values, beliefs, and attitudes of professional identity. Levett-Jones et al. (2015) reported that digital stories helped students increase depth of understanding of beliefs that translate into the values and attitudes that guide practice such as client-centredness. Given the growing momentum for use of digital stories as teaching tools for developing professional values and stimulating reflection, they were chosen as tool for use as part of this thesis research.

Digital stories were compared to other storytelling methods and to directly including clients in student education, so the student researcher and her advisor could better understand advantages and disadvantages of digital stories. The digital format for presentation of a client's story has been found to promote interest in learning (Crookes et al., 2013; Fenton, 2014), and may aid in linking theory to practice (Crookes et al., 2013). Authors have reported that when music was used in digital story formats, it evoked emotion, increased depth of the story, promoted empathy and stimulated reflection in students who observed the digital story (Waugh & Donaldson, 2016). In a qualitative study by Christiansen (2011), digital stories were used as teaching tools with student nurses, who described the digital stories as "a learning resource", "an emotional experience", "a reflective experience" and "a transformative experience" (Christiansen, 2011, p.291). Christiansen (2011) further reported that through emotional connection and stimulation of reflection, digital stories promoted insight into student nurses developing professional identities as client-centred clinicians. When comparing digital stories to directly including clients in healthcare education, digital stories have been noted to provide a means of including youth in the education of students while reducing the vulnerability that would come with having youth present in-person with students (Fenton, 2014). Digital stories also act as a reusable teaching tool, which may be a cost-effective alternative to having clients provide

in-person education for healthcare students (Fenton, 2014; Terry, 2012). The combination of literature which points to digital stories as an effective catalyst for reflection (Christiansen, 2011; Sandars & Murray, 2009; Waugh & Donaldson, 2016) along with literature that has suggested that reflection may encourage client-centredness (Ripat et al., 2014; Sumsion & Law, 2006; Wener et al., 2015; Wilkins et al., 2001) suggests that research regarding digital stories as teaching tools for the development of client-centredness, in the healthcare education student population, is needed.

2.3.5 Learning in IP groups. In selecting data collection methods for this thesis study, advantages and disadvantages of incorporating IP group learning were considered by reviewing IP literature. The NIPCF suggests that through a process of building trusting and respectful IP working relationships, IP healthcare students may have improved ability to learn and enact client-centred care (CIHC, 2010). Research regarding the development of IP knowledge, skills, attitudes, beliefs, and values has previously been completed using IP seminars or groups as part of the research design. For example, evaluation of the developing understanding of the meaning of caring was the focus of an IP study by Chan et al. (2009) in which student nurses and social workers discussed a case study in two IP seminars (each one three hours in duration and completed one week apart). Results of that study revealed that the IP groups promoted openmindedness and a non-judgmental approach among students, which in turn promoted a clientcentred understanding of the meaning of caring (Chan et al., 2009). In another study, Darlow et al. (2015) brought together students from four disciplines (dietetics, medicine, physiotherapy, and radiation therapy) to explore change in student attitudes to IP learning and teams, and they found that participating in an eleven-hour IPE program together, promoted improved attitudes toward IP learning as well as increased knowledge and confidence to provide healthcare services. IP literature supports students from various health professions learning with, from, and about each other and therefore, IP focus groups were a selected data collection method of this thesis research.

2.3.6 Optimal timing of learning opportunities to promote client-centred

development. With a lack of literature available regarding the development of client-centredness in pre-licensure healthcare student groups engaged in an IPE learning experience, optimal timing of learning opportunities is unclear. In Ripat et al. (2014) study of the process of developing client-centredness in student occupational therapists, it was concluded that students developed their client-centred identities throughout their entire academic preparation process, with a focus on developing client-centred knowledge and values early in academic preparation, reflection upon client-centred identity mid-way through programs, and a need to clinically reason through the dynamic flexibility of client-centredness as students enter professional practice. Prior uniprofessional studies suggest that students must begin by developing client-centred knowledge and skills early in academic preparation and then students should be given opportunities to reflectively participate in practice experiences in later portions of academic preparation (Currie et al., 2015; Ripat et al., 2014; Wener et al., 2015). However, one study was identified that suggested that openness to IP learning in the area of client-centredness decreased over time (Hudson, Lethbridge, Vella, & Caputi, 2016), perhaps due to medical student desire to adopt a uniprofessional identity in the absence of encouragement to reflect upon benefits of an IP identity. Thus, there is a lack of clarity about ideal timing of learning opportunities for healthcare student development of client-centredness, leaving this as an area that requires further research.

2.4 Summary of the Literature Review

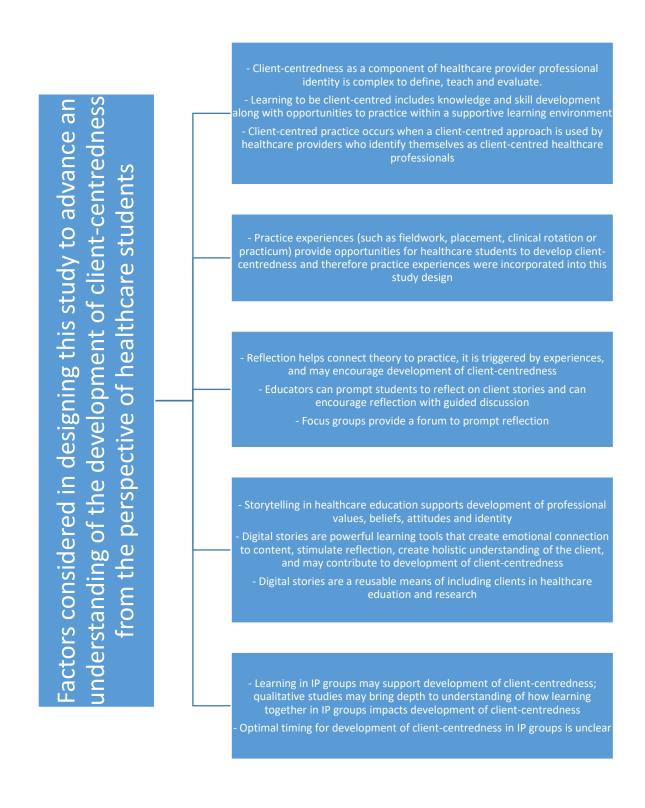
Client-centredness is an IP value, belief and attitude that becomes a part of healthcare provider professional identity and is demonstrated in the skills and knowledge of clinicians as they provide client-centred care. Encouraged at national and international levels, client-centred care is about respectfully including clients, families and communities as partners in the healthcare team. Recognizing the client as an expert is required when planning and delivering client-centred healthcare services. Although educational institutions are teaching future IP healthcare providers to be client-centred, there is a lack of literature to describe how client-centredness develops in pre-licensure healthcare students as they engage in IPE experiences. A summary of the points considered in the development of this research study are found below in *Figure 2*, along with a written summary.

As an IP value, client-centredness is complex to define, teach and assess. Healthcare students may be taught definitions, knowledge and skills for a client-centred approach to practice, and then students must learn how to connect their theoretical learning to the practice environment. Consistent exposure to academic and practice environments that teach, role model and socialize pre-licensure healthcare students to become client-centred may aid in the development of client-centred professional identities. While there is an increasing focus on IPE opportunities in healthcare education, the IP tools for teaching and the specifics of IP role modeling and socialization for the development of client-centredness are not described in the literature.

Exposure to specific teaching tools and educational opportunities may contribute the development of client-centredness in healthcare student populations engaged in IPE experiences.

Practice experiences (such as fieldwork, placement, clinical rotation or practicum) provides

Figure 2. Factors that were explored through literature review while designing this thesis study.



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healthcare students with time to practice using a client-centred approach in a care environment. Learning from practice experiences may be enhanced when students are given the time and structure to reflect upon client-centredness and upon themselves as developing clinicians. For development of an IP competency, learning together in IP groups may be an effective means of development of client-centredness in healthcare students. Storytelling is another means of encouraging students to emotionally engage with academic content to stimulate reflection for client-centred development. Digital stories are a novel means of telling the health story of the client and are a reusable, low-risk teaching tool that may be used to encourage reflection. While digital stories are gaining momentum as teaching tools, they have not been studied for their ability to enhance development of client-centredness in healthcare student groups as they participate in IPE experiences. Finally, optimal timing of educational activities to support the development of client-centredness is unknown, although it appears that development occurs in diverse ways over the course of academic preparation.

Clear evidence-based recommendations outlining the teaching strategies and tools that may bolster client-centred development in pre-licensure healthcare students are lacking.

Qualitative methods of study may bring depth to understanding the complex processes of developing client-centredness and a study design that includes IP focus groups will allow for maximal participant sharing in an IPE context. Digital stories hold promise as an effective catalyst to stimulate reflection leading to increased client-centredness among healthcare students as they develop their professional identities. Understanding client-centred development from the perspectives of pre-licensure healthcare students learning in IP groups will provide valuable information to educators for future curricular planning and will add an IP perspective to the small uniprofessional body of literature regarding the development of client-centredness. While

this literature review supports a study that will first and foremost inform healthcare educators about student perspective on the development of client-centredness in healthcare students, the ultimate aim is to improve client-centred care through enhanced education of pre-licensure healthcare students as they engage in an IPE experience.

3.0 Methodology, Theoretical Perspective, and Methods

3.1 Methodology

A qualitative research approach was selected due to the limited literature available to describe how client-centredness develops in pre-licensure students in an IPE context. Qualitative research designs view participants as experts and are chosen when the goal of research is to increase understanding of a complex issue (Creswell, 2014; Munhall, 2012). Client-centredness is complex to define and teach, and the assessment of client-centred development cannot be justly measured with solely quantitative methods of research.

Interpretive description is a rigorous qualitative research approach that allows practical understanding of an area of study so that researchers can produce meaningful results for the applied health science disciplines (Thorne, 2008). The purpose of this study was to understand the perceptions of pre-licensure healthcare students engaged in an IPE experience, including those in applied health science disciplines, regarding the development of client-centredness. Understanding how client-centredness develops for a group of pre-licensure healthcare students engaged in an IPE experience has the practical application of generating knowledge about best teaching tools and strategies so that curriculums may be enhanced, and practice experience educators may further encourage development of this important competency.

Using interpretive description, the student researcher was able to search for patterns of experience within a group of pre-licensure healthcare students and then the descriptive data were taken a step further to promote understanding of how and why the data gathered could be applied to future academic opportunities (Thorne, 2008). Interpretive description promoted recognition of the contextual nature (Thorne, Kirkham, & MacDonald-Emes, 1997) of students from multiple healthcare disciplines discussing together the development of a shared IP competency.

Interpretive description provided a framework that allowed the researchers to structure the study so that practice experiences (such as fieldwork, placement, clinical rotation, or practicum) were available before the final focus group, and data collection and analysis were carefully linked together in defensible ways (Thorne, 2008). Using interpretive description, this study was designed specific to the context required to optimally describe and interpret understanding (Thorne, 2008) of how pre-licensure healthcare students develop client-centredness within an IPE context.

3.2 Guiding Conceptual Framework

When using interpretive description methodology, selection of a guiding conceptual framework is recommended to help establish boundaries of exploration and to ensure that preconceptions are known (Thorne et al., 1997). The student researcher recognised current knowledge in the field of IP collaboration and IPE and made explicit note of the NIPCF being used at the U of M in the Rady FHS (2016). Consistent with the ideas of the NIPCF, the student researcher believes in the potential for client-centredness to be enhanced when healthcare students learn "about, with and from each other" (Rady FHS, U of M, 2017, p.1); therefore, opportunity for learning about, with and from each other was incorporated into the design of this study. Reflective journaling and analytic memos were maintained to help the student researcher consciously increase awareness of an IP lens, given that the student researcher and her study advisor both have an OT disciplinary background.

This study was theoretically informed by a lens of IP collaboration as well as that of OT. The student researcher maintained conscious awareness of the OT background of herself and her study advisor throughout the study process, and thesis committee members included a nurse who was also the Vice-Dean, Education, Rady FHS, U of M. The student researcher was conscious

when reviewing literature to draw from literature of multiple disciplinary orientations. Care was taken to develop semi-structured focus group guides with an IP emphasis and language. The student researcher was aware that probing questions during data collection may have been influenced by an OT theoretical background, and therefore the student researcher and her study advisor were conscious to check and cue one another to maintain an IP perspective. The student researcher consistently returned to the study purpose and research objectives during data analysis to draw back toward a lens of IPE and IP collaboration.

3.3 Methods

3.3.1 Recruitment and sampling strategies. A purposive sampling strategy was used in this study to deliberately select participants who were knowledgeable in the area of study (Creswell, 2014). This study intended to gain the perspective of one group of pre-licensure students from various health professions, following them over time, and therefore, sample size was limited to promote in-depth description and interpretation of the perspectives of the study group (Thorne, 2008). The student researcher was conscious of limitations of drawing knowledge from one small group of research participants (Thorne et al., 1997); for example, recognizing that the perspectives of this group of participants may not be the same as that of students from another university and recognizing that this self-selected group of participants may be biased toward IP learning and toward client-centredness.

Pre-licensure healthcare students were recruited from the nine professional health disciplines included in the Rady FHS as well as the Faculty of Social Work at the U of M. Thorne (2008) suggested that when using interpretive description methodology, sample size typically ranges from five to thirty participants and should be justified by the research questions. The study aim was to have one group of a maximum of eight participants. Group size was

limited to protect the dynamics of the group and provide ample opportunity for all study participants to have a voice. In this study, a small sample size from which in-depth information could be drawn was desirable because (a) there is a lack of literature on the topic of development of client-centredness in pre-licensure healthcare students within an IPE context, and (b) study results may be valuable to the developers of the IP Collaboration Curriculum at the Rady FHS where IP Collaborative Care cohorts are part of a relatively new initiative that similarly includes small IP student groupings (Rady FHS, U of M, 2016). The study aimed to have a maximum of one participant per discipline in the IP group to ensure that there was equal disciplinary perspective. The inclusion criteria were as follows:

- Each participant was a pre-licensure healthcare student enrolled in one of the following U of M programs for the 2017-2018 academic year: (a) Bachelor of Nursing, College of Nursing, Rady FHS; (b) Bachelor of Respiratory Therapy, College of Rehabilitation Sciences, Rady FHS; (c) Bachelor of Science (Pharmacy), College of Pharmacy, Rady FHS; (d) Bachelor of Social Work, Faculty of Social Work; (e) Diploma in Dental Hygiene, College of Dentistry School of Dental Hygiene, Rady FHS; (f) Doctor of Dental Medicine, College of Dentistry, Rady FHS; (g) Master of Occupational Therapy, College of Rehabilitation Sciences, Rady FHS; (h) Master of Physical Therapy, College of Rehabilitation Sciences, Rady FHS; (i) Master of Physician Assistant Studies, Max Rady College of Medicine, Rady FHS; or (j) Medical Doctor Program, Max Rady College of Medicine, Rady FHS.
- 2. Each participant was available to participate in three focus groups, each lasting approximately 90-120 minutes and occurring approximately two to three months apart

3. Each participant was required to, as part of their regular academic preparation, have at least one practice experience (such as fieldwork, placement, clinical rotation or practicum) opportunity between the first and the third focus group so they may draw on this experience.

There were several steps to the recruitment procedure. An email (Appendix A) with an attached recruitment poster (Appendix B) was sent to college and faculty contacts (Appendix C) at the selected Colleges within the Rady FHS and the Faculty of Social Work at the U of M. Follow up phone calls and emails were completed with college and faculty contacts as required, for example, some faculty members wanted to be given a copy of the HREB certificate of approval for the study. The email communication requested support with recruitment in two ways (a) requesting that the recruitment poster be put up in student locker/information/shared areas, and (b) requesting that the college or faculty contact person, please provide the student researcher with a name and contact information for the student rep in the program of study. In faculties where student rep contact information was acquired, the student researcher contacted the student reps by phone and/or email to request their assistance with recruitment based on the student rep's knowledge of acceptable information sharing methods in each program of study; for example, by the student rep placing the poster on the program social media site, or by the student rep announcing the study before/after a class and then directing interested participants to the recruitment poster. While the recruitment period was anticipated to be two-weeks in duration (October 11 to October 27, 2017), it was extended to five weeks in order to achieve an acceptable sample size.

Upon being contacted by potential research participants, a participant screening questionnaire (Appendix D) was sent to the potential participants to confirm their eligibility for

the study. Potential participants were asked to return the screening questionnaire by email, mail or in-person. Screening questionnaires were collected for the duration of the study recruitment period. At the conclusion of the recruitment period, participants were contacted by their preferred method of communication (phone or email) to inform participants about entry or denial for inclusion in the study. Six participant screening questionnaires were sent out. Five of the six potential participants met the inclusion criteria. One of the six potential participants stated that they would not have opportunity to partake in practice experience between the first and third focus group, however, they had prior practice experience as part of their regular academic preparation upon which to draw knowledge for the focus group discussions. The study proposal had aimed to recruit eight participants each of a different disciplinary background. However, of the six participants who came forward, there were two from dental hygiene and two from pharmacy (different years of the program). Accepted participants were provided with further information and instructions about the study. A copy of the Health Research Ethics Board (HREB) research participant information and consent form (Appendix E) was provided to each participant for review.

At the first in-person encounter, the student researcher and her study advisor began by verbally providing details of the study to the participants and ensuring signatures on the research participant information and consent forms (Appendix E). After participants signed the research participant information and consent forms, participants were asked to record their contact information on the participant contact information form (Appendix F) for follow-up member checking during the data analysis period of the study. Participants were provided with a signed copy of the research participant information and consent form to keep.

3.3.2 Data collection methods. A study guided by interpretive description typically makes use of a range of qualitative data sources including more traditional sources of qualitative data such as interviews and observation of participants, as well as non-traditional data sources (Thorne et al., 1997). The following data collection methods were used in this study (a) participant description questionnaire, (b) focus groups, and (c) field notes.

Each participant completed a brief participant description questionnaire (Appendix G), used to collect basic demographic information including (a) pre-licensure healthcare educational program of enrollment, (b) year of educational program, (c) prior education, (d) prior career experience, (e) prior IP learning opportunities, (f) timing of practice experiences opportunities, (g) age, and (h) gender.

Focus groups were the main form of data collection in this study. Carey stated that "focus groups provide insight into beliefs and attitudes that underlie behaviour" and serve as an effective method of collecting data that cannot be easily captured by other methods of data collection (1994, p.225). For example, in Byszewski et al.'s (2015) mixed methods study of professionalism development in Canadian medical schools, the researchers used a focus group to collect data that could not effectively be drawn from the earlier survey data collection method used in the study. In the focus group setting, participants were able to compare, contrast and build upon each other's ideas in a flexible but facilitated manner while the researchers observed participant interactions (Morgan, 1997) during the IP discussion about development of client-centredness.

Focus groups were co-facilitated by the student researcher and her study advisor. Each focus group was digitally audio recorded, transcribed by the student researcher and analyzed.

Each focus group began with discussion guided by a semi-structured focus group guide

(Appendix H), which was in-line with the research questions. Mid-way through each focus group, participants were presented with one of three client digital stories to stimulate further discussion and reflection among the participant group. The semi-structured focus group guide (Appendix H) continued to be used after participants were presented with the client digital story until the conclusion of the focus group.

Focus groups one and two concluded with provision of written and verbal guidance (Appendix I) regarding recommendations for reflective journaling during classroom-based learning and practice experiences that occurred for participants as part of their regular academic preparation. Participants were provided with a blank reflective journal to keep. Participants were asked to bring their reflective journals to the next focus group to help with recall of experiences of client-centredness. Focus group three concluded by thanking participants for their time and participation in the focus groups and reminding participants that they would be contacted at a later date for member checking if they had agreed to participate in the member checking process.

The student researcher and her study advisor completed post-group reflective discussions and then field notes were written by the student researcher following each focus group to gather data that could not be captured by digital audio recordings, such as the context of the focus group discussions and the mood of the group (Robinson Wolf, 2012; Thorne et al., 1997). Field notes captured observational details including non-verbal communication among participants, the communication styles of participants, and the manner in which participants interacted with each other (Robinson Wolf, 2012). Field note data were used by the researchers to modify facilitation strategies of the subsequent focus groups; for example, researchers made notes to cue the more passive group participants to contribute to discussion so that the voice of all focus group participants would be represented in the data. Furthermore, field notes were considered during

data analysis to capture data such as head nods of agreement or disagreement from the less verbally spontaneous participants in the focus groups.

Although not collected for analysis, researchers asked participants to maintain their own reflective journals as a means of increasing the richness of information discussed during the focus groups. Collection of reflective journals for qualitative analysis was considered by researchers during the planning phase of this study based on literature review which identified some studies that collected reflective journals from participants for analysis (e.g., Currie et al., 2015). However, the student researcher and her study advisor decided focus group data would provide a rich data source without the need to place the additional burden of reflective journal completion upon participants. Therefore, as a strategy to promote ongoing engagement of study participants while adding richness to the focus group data collection process, reflective journaling was recommended but not required of participants.

3.3.3 Data analysis methods. Consistent with interpretive description, an inductive analysis approach was taken (Thorne et al., 1997) to understand the development of client-centredness from the perspective of pre-licensure healthcare students. Researchers considered the overall story told by the data by asking general questions such as, "what is happening here?", rather than analyzing small data bits such as single words or very short phrases (Thorne et al., 1997, p. 174). While data analysis began after the first focus group, creating a concurrent data collection and analysis process, reflective and analytic memos were maintained to help researchers consider initial thoughts about themes or patterns while avoiding overemphasis on early data (Thorne, 2008; Thorne et al., 1997). Thematic analysis was chosen as a six phase, foundational qualitative analysis method that allowed flexibility and was used to help guide researchers toward a rich description and interpretation of the data (Braun & Clarke, 2006).

The first phase of thematic analysis was familiarization with the data (Braun & Clarke, 2006). After completion of the first focus group, the student researcher and her study advisor reflected on the focus group and verbally considered our initial impressions. The student researcher wrote field notes for later analysis. To promote engagement of the researcher and deep, deliberate attention to all parts of the data, the student researcher transcribed the digital audio recording within approximately one week of focus group completion, anonymizing the data during this process. The first focus group data set consisting of the focus group transcription, field notes and memos, was independently reviewed by the student researcher and her study advisor to gain a sense of the entire first data set all at once (Thorne, 2008). As recommended by Braun and Clarke (2006), researchers repeatedly read through the data set prior to beginning the coding process. The student researcher and her study advisor each independently recorded thoughts and interpretations as reflective journal entries and analytic memos for consideration later in the analysis process (Thorne, 2008). Analytic memos were used as a reflective research strategy to help the researchers make sense of the research data, to critically think about the analysis process and reasons for analysis, and to increase awareness of researcher thoughts and actions (Creswell, 1998; Saldana, 2009). The student researcher and her study advisor met in person to discuss initial thoughts and ideas about the first focus group data set and to adapt the semi-structured focus group guide (Appendix H) to promote rich data collection at the second and final focus groups. Phase one analysis continued after conducting the second focus group. Within one week of the second focus group, another set of reflective journal entries and analytic memos were written by the student researcher. The student researcher transcribed and anonymized the second digital audio recording. To promote emersion in the data, the student researcher and her study advisor repeatedly read through the second focus group data set and recorded further analytic memos for reference later in the analysis process.

The purpose of the analytic memos was to ensure broad reflection upon the study purpose, objectives and research questions.

Phase two of thematic analysis involved generating initial codes (Braun & Clarke, 2006). A code was a short phrase that the researchers used to capture the meaning, essence, or prominent elements of the data (Saldana, 2009). Codes identified key concepts, processes, times, places, actions, intentions, beliefs, roles or relationships (Robinson Wolf, 2012; Saldana, 2009). Coding in this study was driven by the data, bearing in mind the research questions. The student researcher and her study advisor each independently and manually coded the first two focus group data sets prior to completion of the third focus group. The researchers systematically worked through the data, marking codes in the transcript margins as the researchers identified ideas that stood out as important (Braun & Clarke, 2006). After marking initial codes in the transcript margins, a separate document was created to collate coded data. At this phase in the data analysis, the analysis goal was to generate as many codes as possible (Braun & Clarke, 2006). Quotes extracted from the data maintained some of the surrounding data to capture context, and at times researchers coded extracts multiple times or in multiple ways (Braun & Clarke, 2006). The second phase of analysis continued after conducting the third focus group. The analysis process was repeated with the third focus group data set, including writing memos, transcribing data, familiarizing with the data, initial coding in the margins of transcripts, and final collating of data extracts.

The third phase of data analysis was an iterative process of theme development. Themes depicted what was meaningful, important or prominent in the data (Braun & Clarke, 2006). The student researcher and her study advisor initially discussed the coded and collated data to

consider how it related to the study purpose and objectives. Consideration was given to the entire collated data set while also pondering where initial themes appeared more prevalent in one focus group data set compared to others. Coded data were sorted into potential themes by the student researcher. The student researcher maintained memos to maintain conscious awareness of an IP lens, to critically consider study purpose and objectives, and to reflect upon evolving thoughts regarding theme development. The student researcher met with her study advisor to repeatedly deconstruct and reconstruct themes with a goal of increasing clarity of understanding the data (Thorne, 2008). Analysis of data in an interpretive description study works to synthesize and recontextualize data, as well as theorize during the analysis process (Thorne et al., 1997). The student researcher and her study advisor developed diagrams to represent the data in visual and written form during the process of theme development.

The fourth phase of data analysis involved a process of reviewing and refining themes. During this data analysis phase, themes and subthemes were separated, expanded, collapsed, and reorganized, and researchers made decisions to discard some data that were considered less relevant to bringing forward a unique contribution to the literature (Braun & Clarke, 2006). Researchers aimed to develop themes that were coherent and the student researcher and her study advisor continually revised themes until consensus was reached that the themes were an accurate reflection of the data (Braun & Clarke, 2006). A diagram was iteratively developed to represent the data, striving to produce results that would be meaningful for healthcare education program planners as well as classroom and practice-experience educators.

The fifth phase of data analysis involved the final naming and defining themes then returning to collated data extracts to identify why and how the data extracts have led to the final themes (Braun & Clarke, 2006). The student researcher continually reviewed the research

questions, study purpose and objectives to ensure that the analyzed data told a clear and justifiable story in-line with the goals of the study. Given the decision to produce a manuscript-style thesis, in which a manuscript is embedded in the broader thesis document, the student researcher and her study advisor agreed that a separate discussion section would be written to address the digital story component of the final research objective, which did not fit with the themed representation of the data as a whole. The student researcher and her study advisor confirmed that the results of data analysis advanced an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students.

The sixth and final phase of thematic analysis was to write a report to provide a compelling account of the data (Braun & Clarke, 2006). This report attended to the contextual nature of the gathered data by drawing in information from the participant description questionnaires (Appendix G) and it ensured that there was depth to the understanding of the results in relation to the research questions. Prominent examples of data extracts were selected by the student researcher to clearly demonstrate the themes and the stories that were drawn from the data. In this report, the student researcher aimed to promote understanding of how and why the study results may be applied to future curricular opportunities for the development of client-centredness in IPE. The student researcher has provided an interpretive description of the possible reasons for the themes and the implications of the themes for future pre-licensure students from various health professions.

3.3.4 Methods of enhancing rigour and trustworthiness of the study. Rigour in qualitative research includes multiple strategies which are used to help confirm meaning of analysis, avoid bias, and ensure that conclusions drawn from the analysis process are of high

quality (Miles & Huberman, 1994; Morse, 2015). This study employed several strategies to increase rigor.

Credibility may be enhanced through strategies such as prolonged engagement, triangulation, peer debriefing, or member checking (Morse, 2015). Strategies for increasing credibility are used to increase the degree to which the research results accurately represent the phenomenon of interest (Morse, 2015). This study included prolonged engagement by including three focus groups, each 120 minutes in duration, with a consistent group of participants, which allowed participants to develop trust with the researchers, leading to richer data (Morse, 2015). The student researcher and her study advisor each independently coded the focus group data and then met to discuss data analysis repeatedly until the point of consensus as a triangulation strategy. Peer debriefing with committee members occurred at select times to draw on the expertise of committee members to help ensure data were accurately represented. Thorne et al. (1997) has recommended that summarized data should be provided to participants so they may consider how well the summary fits or does not fit with individual recall of the data they originally provided. Member checking was completed by emailing a summary of the results to participants (Appendix J) to confirm if the participants believed the results to be a true representation of their perceptions; no changes were required as per results of the member checking process.

Transferability was enhanced through the provision of thick description which increases the ability to transfer the findings of the study to another setting (Morse, 2015). Demographic information about participants was captured by the participant description questionnaire.

Participant quotes have been used to illustrate themes found in the data as a means of thick description.

Dependability and confirmability were enhanced by use of triangulation of data and maintenance of an audit trail (Morse, 2015). Triangulation of various sources of data to encourage clear and thorough justification of results is a strategy frequently used in qualitative research to increase study validity (Creswell, 2014). Researchers carefully considered participant background as provided on the participant description questionnaires while reviewing focus group transcripts and returning to field notes to incorporate non-verbal data throughout the data analysis process. An audit trail was maintained to record the development of ideas throughout the analytic process to improve the ability of the student researcher to defend the study results as having clear grounding in the data (Thorne et al., 1997). Analytic memos were written at multiple points throughout data collection and analysis, contributing to the audit trail. Finally, the student researcher maintained a reflective journal to help ensure continual awareness of how preconceptions may have influenced the study process or interpretation of results (Thorne et al., 1997).

3.3.5 Ethical considerations. Ethical approval for this study was obtained from the HREB at the U of M (Appendix K). Each participant was provided with verbal and written description of the study prior to enrollment, and participants were given opportunity to ask questions or seek clarification about the study prior to consenting to involvement. Each participant was provided with the participant information and consent form (Appendix E) for signature prior to initiation of data collection to ensure informed consent. With data collection occurring over the course of approximately five months and the request for participants to engage in three focus groups, consent was verbally reaffirmed at each point of contact to ensure continued interest in participation.

To recognize the investment of time required by participants in this study, a small honorarium was provided to each participant at each focus group. Participants were provided with light refreshments at each focus group. Each participant was provided with a blank journal to keep.

Confidentiality was maintained by multiple strategies. All data that contained identifying information were securely stored in a locked location at the U of M. Focus group digital audio recordings were converted to MP3 files immediately after the focus groups and saved on a password protected USB flash drive which was stored in a secure locked location. Immediately after transferring the digital audio recordings to the USB flash drive, the digital audio files were deleted from the recording devices. Focus group digital audio recordings were transcribed verbatim, cleaned to remove any identifying information, and saved as Word documents on a password protected USB flash drive that was stored in a secure locked location. Participant description questionnaire data were anonymized. Data will be destroyed three years after the completion of this study.

3.3.6 Knowledge translation strategies. The purpose of this study was to advance an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students within an IPE context. As a Master of Science (Rehabilitation Sciences) student who is simultaneously working as an OT at the U of M affiliated hospital, the Health Sciences Centre (HSC), the student researcher has already presented results at General Psychiatry Program Rounds in March, 2019, and at OT Grand Rounds in June, 2019. The student researcher was accepted for presentation of study results at the CAOT 2019 national conference on June 1, 2019 and a paper presentation was completed. A poster presentation has been shared regarding the digital stories portion of the literature review, at the 2017 Canadian Conference on

Medical Education pre-conference. The results of this study may be of value for educators at the U of M Rady FHS whom are already striving to expose students to client-centred care as a competency domain in the NIPCF. The student researcher will work with study advisors to bring results and conclusions back to the Office of Interprofessional Collaboration at the U of M. As an OT, the student researcher will further offer to share results with Faculty at the College of Rehabilitation Sciences at the U of M as deemed appropriate by the student researcher's advisory committee.

Healthcare educators include faculty at universities as well as licensed clinicians who provide supervision to pre-licensure healthcare students as the students participate in practice experiences (such as fieldwork, placement, clinical rotation or practicum). To reach this broader audience of practicing healthcare providers, the student researcher intends to submit for peer-reviewed publication. The student researcher will seek the advice of committee members and, as appropriate, will engage in conversation with U of M librarians to determine appropriate journal selection.

4.0 Results

The results of this study are presented in one manuscript, titled, *Discussion among*Reflective Interprofessional Healthcare Students Promotes Development of Client-Centredness.

The manuscript presented in Chapter 5 addresses the perspective of healthcare students regarding how client-centredness develops within an IPE context, with an aim to provide practical understanding and results that will be meaningful for healthcare educators. Chapter 5 concludes with references for the manuscript; these references are also added to the reference section located at the conclusion to this complete thesis.

The Chapter 5 manuscript is followed by a short discussion chapter regarding the digital stories portion of the final research objective, as this information could not be adequately captured in the Chapter 5 manuscript which has been prepared for easy adaptation for publication.

A concluding chapter is provided with discussion incorporated regarding how this thesis contributes distinct knowledge to the area of research.

5.0 Discussion among Reflective Interprofessional Healthcare Students Promotes Development of Client-Centredness

5.1 Background and Literature Review

Client-centredness is a professional value of healthcare providers (Currie et al., 2015; Ripat, Wener, Dobinson, & Yamamoto, 2014), that supports delivery of high-quality care (Accreditation Canada, 2014). The World Health Organization (WHO): Western Pacific Region has recognized client-centred care as a means of providing "a more humanistic and holistic approach to health care, where the individual who needs care is viewed and respected as a whole person with multidimensional needs" (2007, p.4). The National Interprofessional Competency Framework (NIPCF) used in Canada, has described client-centred care as one of six practicefocused competencies that require "development and demonstration of the knowledge, skills, attitudes, values and judgements involved in practicing collaboratively" (Canadian Interprofessional Health Collaborative [CIHC], 2010, p. 8). Interprofessional education (IPE) occurs when multiple healthcare "professions learn with, from and about each other" as a means of improving "collaboration" and quality care (Centre for the Advancement of Interprofessional Education, 2019, p.1). Canadian healthcare educators are striving to expose students of multiple healthcare professions to the six competency domains of the NIPCF (Rady Faculty of Health Sciences [FHS], University of Manitoba [U of M], 2017). However, professional values such as client-centredness that guide healthcare practices are difficult to teach in explicit ways and are equally difficult to evaluate. Furthermore, there is limited literature available regarding how client-centredness develops in pre-licensure healthcare students within the context of IPE.

There is no single definition for client-centredness in the healthcare literature, however, there is consistency in core concepts which come from the perspectives of the client, the

clinicians contributing to the care of clients, the institutions that provide service, and from the policies which govern and guide the provision of healthcare services. While the term, client, is used by occupational therapists to describe the individual person, family, group, community, or population who participates in healthcare service together with healthcare providers (Townsend & Polatajko, 2013), other terms may be used synonymously to describe the recipient of healthcare services, such as, patient, or person (Hughes, Bamford & May, 2008). Clientcentredness is a professional value, belief, and attitude which is applied through a client-centred approach that may be evident in the actions, skills, knowledge and behaviours of healthcare providers as they participate in client-centred practice within the context of a care environment (CIHC, 2010, Ripat, 2017). Client-centredness includes valuing the client as a person (Corring & Cook, 1999), who is knowledgeable and experienced (Canadian Association of Occupational Therapists [CAOT], 2015), while demonstrating skilled communication and working to balance power in the client-clinician relationship to promote shared decision-making (Hughes et al., 2008, Sumsion, 2005, Thomson & Doody, 2010). Client-centredness includes respecting unique client context while engaging in a care partnership that allows for collaborative goal-setting (Phoenix & Vanderkaay, 2015). To be client-centred is to provide care that is comprehensive and timely across the continuum of care, (Canadian Medical Association, 2010; Canadian Nurses Association, 2015) while carefully balancing resources so that population healthcare needs will be met for years to come (Green et al., 2014).

The complexity of defining client-centredness may contribute to the lack of literature available to describe how client-centredness develops in healthcare students. Uniprofessional literature reported that student occupational therapists describe their development of client-centredness as a process of continually defining the client, building relationships, negotiating

academic/practice discrepancy, navigating the influences of systems, power and control, and ultimately, internalizing client-centredness (Ripat, Wener, & Dobinson, 2013). Further uniprofessional literature described how first year nursing students initially learn about the meaning, value, and the "component parts" of providing client-centred care, and students later learn how to apply concepts of client-centredness to "standard processes and procedures" of care provision during practice experience opportunities within academic preparation (Currie et al., 2015, p.241). While clues about student development of client-centredness were found in uniprofessional literature, client-centredness has been described as a core competency of IP teamwork and practice (Interprofessional Education Collaborative Expert Panel [IPEC Expert Panel], 2011), and therefore understanding healthcare student development of client-centredness within an IPE context is of utmost importance.

Core competencies help guide development of curriculum and approaches to learning so that pre-licensure healthcare students develop the attitudes, values, knowledge and skills for future collaborative client-centred practice (IPEC Expert Panel, 2011; WHO, 2010). Canadian health organizations and professionals, along with educators, researchers, and healthcare students have come together to form the CIHC with the common belief that "interprofessional education and collaborative patient-centred practice are key to building effective health teams and improving the experience and outcomes of patients" (2010, p.2). However, there is insufficient evidence in the literature about the specific curricular activities healthcare students perceive best support their development of client-centred attitudes, values, knowledge and skills within an IPE context.

Teaching methods that stimulate emotional connection to content and promote reflection hold promise when teaching skills for client-centred practice and promoting development of

professional identity. For example, researchers have found that client-centred counselling skills can be enhanced by use of tools to stimulate reflection among student occupational therapists (Wener et al., 2015). Edwards (2017) described reflection as a process which encourages students to connect past and present experiences to guide future experiences. "Reflection-inaction", an idea brought forward by Schön (1983, p.21) was expanded by Edwards, who advocated for a "four-dimensional" reflective process, namely "reflection-before, reflection-in, reflection-on, and reflection-beyond action" (2017, p.1). Edwards proposed that care providers develop as professionals during the process of reflecting: (a) before client-care; (b) in-themoment of client-care provision; (c) immediately or shortly after provision of client-care experiences; and (d) beyond care provision, to increase self-awareness and promote transformative learning. Reflection has been recommended as a means of bolstering application of a client-centred approach to practice among occupational therapists (Sumsion & Law, 2006; Wilkins, Pollock, Rochon, & Law, 2001), and in a study that looked at student nurses experience of patient digital stories as a teaching strategy, researchers found that digital storytelling provided an emotional experience which promoted reflection and contributed to student nurses' developing sense of professional identity (Christiansen, 2011). Literature review revealed that Doherty, Knab, and Cahn (2018) implemented an interprofessional (IP) common reading program with students from four healthcare disciplines to explore if insights gained from reading the story would be applied in practice. The authors reported that reading the story helped students empathize and reflect on themselves which increased motivation to enact clientcentredness within practice (Doherty et al., 2018). Furthermore, the common reading program helped establish common ground with peers from four different healthcare disciplines (Doherty et al., 2018).

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IP discussion is cited in the literature as a contributing factor in development of common IP values and core competencies of healthcare providers. For example, when students in nursing and social work were brought together to evaluate developing understanding of the meaning of caring, seminars built around a case scenario enabled discussion and deep thinking about caring, and authors concluded that cross-discipline learning about how uniprofessional theories guide practice, led to an IP perspective of caring, where the client was viewed more holistically (Chan, Mok, Po-ying, & Man-chun, 2009). Similarly, Anderson, Smith, and Thorpe (2010) found that in an IP learning model that supported client-centredness, when medical and social work students worked together, students valued the opportunity to share and discuss ideas in the IP setting where they could draw on one another's knowledge bases while reflecting on attitudes and culture in healthcare practice.

Collaborative client-centred practice is evident in the skills, knowledge and behaviours of clinicians who have adopted a client-centred identity, however, the literature does not adequately describe how students develop their client-centred identities. Qualitative analysis in uniprofessional studies of other components of professional identity have suggested that explicit teaching of concepts, skills and behaviours should be paired with opportunities to practice in a context supportive of learning, to encourage professional identity development (Byszewski, Gill, & Lochnan, 2015; Khomeiran et al., 2006; Wilson & Carryer, 2008). Practice experiences such as fieldwork, placement, clinical rotation or practicum are integrated into healthcare education programs to create real-life opportunities for students to work with clients and develop their skills for practice under the supervision of licensed clinician-educators. The potential learning impact of practice experiences depends on student motivation (Khomeiran et al., 2006) as well as

educator ability to both role model and encourage focus on professional identity development (Byszewski et al., 2015; Khomeiran et al., 2006; Wilson & Carryer, 2008).

In summary, teaching methods that kindle emotional connection to content, stimulate reflection, and encourage IP discussion and collaboration may contribute to the development of the value of client-centredness, however, the perspective of healthcare students within an IPE context, regarding development of client-centredness is lacking in research literature. Learning from the experiences of healthcare students engaged in an IPE experience will help establish clear evidence-based recommendations regarding the teaching tools and strategies that best encourage development of client-centredness in pre-licensure healthcare students within an IPE context. Thus, the purpose of this qualitative study was to advance an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students within an IPE context. The specific research objectives were: (a) to explore how pre-licensure healthcare students, engaged in an IPE experience, describe client-centredness and how they perceive client-centredness fits within their professional identity, theories and values; (b) to gain an understanding of how pre-licensure healthcare students learn about client-centredness; (c) to understand how pre-licensure healthcare students learn with, from, and about each other when developing client-centredness; and (d) to examine factors that contribute to the development of client-centredness in pre-licensure healthcare students by using digital stories as a catalyst for discussion and by asking students to reflect on practice experiences in their academic preparation.

5.2 Methods

The selected qualitative research approach for this study was interpretive description because it is an approach that promotes practical understanding coupled with rigorous

exploration of a multifaceted topic to produce meaningful results for the applied health science disciplines (Thorne, 2008). This qualitative research design was chosen as authors viewed participants as experts who may bring depth to our comprehension of the complexity of understanding pre-licensure healthcare student development of client-centredness (Creswell, 2014; Munhall, 2012).

The study was approved by the U of M Health Research Ethics Board, and a purposive sampling strategy was used to recruit participants from ten professional education health disciplines over a five-week recruitment period in the fall of 2017, aiming to study the perspective of participants who were knowledgeable and willing to share their viewpoints (Creswell, 2014; Thorne, 2008) in an IP setting. Participants were screened to confirm study eligibility including availability to participate in three focus groups, each lasting 90-120 minutes and each occurring two and a half months apart. Additionally, study participants each agreed that they would have had opportunity as part of their regular academic preparation to participate in at least one practice experience (such as fieldwork, placement, clinical rotation or practicum) prior to conclusion of the third focus group. Selected participants voluntarily provided informed, written consent, and a small honourarium was provided upon completion of each of the three focus groups.

Multiple data sources informed this study, with focus groups being the main form of data collected. Each participant completed a participant description questionnaire to collect basic demographic information to help researchers to better understand the participant perspectives. Focus groups were chosen as an effective data collection method to gain insight into beliefs and attitudes (Carey, 1994). Focus group size was limited, to protect the dynamics of the group and provide ample opportunity for all study participants to have a voice. Participants in a focus group

have opportunity to compare, contrast or build upon each other's ideas in a flexible but facilitated fashion (Morgan, 1997), setting ideal conditions to draw out healthcare student perspective on the topic of investigation. Focus groups allowed researchers to observe how participants interacted (Morgan, 1997) while discussing development of client-centredness, to gain perspective of how students learn with, from, and about each other during an IPE experience. Field notes were used to capture context of the focus group discussion such as the non-verbal communication among participants and the mood of the group, to aid in the thick description of this qualitative study (Robinson Wolf, 2012, Thorne, Kirkham, & MacDonald-Emes, 1997).

Focus groups were held with the same group of participants in November 2017, January 2018, and March 2018 and were facilitated by the primary investigator (PI) and her study advisor. Each focus group began with discussion guided by a semi-structured focus group guide which was in-line with the research questions and was modified between each focus group to ensure depth of collected data. Mid-way through each focus group, participants were presented with one of three client digital stories to stimulate further discussion and reflection among the participant group. November and January focus groups concluded by providing participants with recommendations for reflective journaling during classroom-based learning and practice experiences that occurred for participants as part of their regular academic preparation; journals were not collected but instead used to help participant recall of experiences of client-centredness. Focus group data were digitally audio recorded and transcribed verbatim by the PI immediately following each focus group.

Thematic analysis was chosen as a flexible foundational qualitative analysis method which includes six phases of analysis (Braun & Clarke, 2006). Phase one analysis included the

PI and her study advisor familiarizing themselves with the data, beginning after the first focus group and continuing throughout. During the second stage of analysis, the PI and her study advisor individually generated initial codes and met regularly to discuss analysis after each focus group. Third stage analysis included organizing coded data extracts for formation of initial categories and themes, iteratively refining and reorganizing until the fourth phase of analysis during which consensus was reached that all themes were a coherent and accurate reflection of the data. During the fifth phase of analysis, diagrams were developed to name and further define themes and to ensure analysis had achieved study purpose. The final phase of thematic analysis was to generate a compelling interpretive description of the data so that possible reasons for the results and implications for practice may be understood by others.

Rigour was enhanced in this study through multiple strategies. Researchers maintained prolonged engagement with the participants over the course of three focus groups each lasting approximately 120 minutes. Data triangulation occurred through collection of data from multiple sources, and during the analysis process. Member checking was completed to ensure accurate summarisation of results and conclusions. Peer debriefing with the PI's committee members was completed as required throughout the process. Thick description found in this report enhances transferability. The PI maintained a reflective journal and an audit trail to increase dependability and confirmability of this study.

5.3 Results

Six participants (who will be referred to as students from this point forward) were recruited into this study. All were between ages 18 and 25 years old, and none of the students had prior career experience. There were five female students and one male student. Two students had prior bachelor's degrees before enrollment in their professional education program, and five

of the six students reported participation in some form of IP learning opportunities prior to study enrollment. All students had practice experience opportunities either prior to commencing the study or during the course of the study. Table 1 describes the professional education program which each student was enrolled in as well as their year of enrollment within their program.

Table 1

Participant demographics

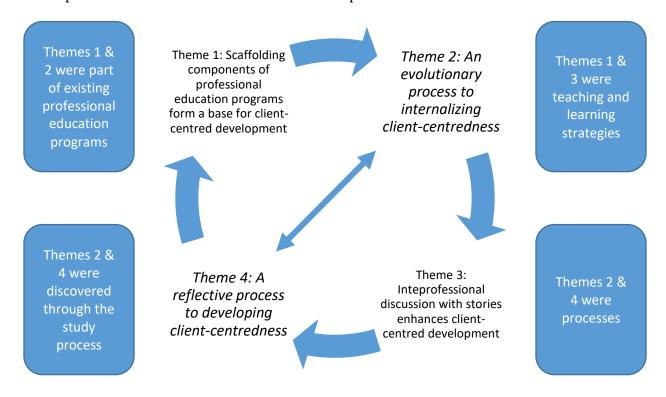
Professional education program of enrollment	n
Year 3 of 3-year Bachelor of Respiratory Therapy	1
Year 1 of 4-year Bachelor of Science (Pharmacy)	1
Year 3 of 4-year Bachelor of Science (Pharmacy)	1
Year 1 of 2-year Diploma in Dental Hygiene	2
Year 2 of 2-year Master of Occupational Therapy	1

Note. Table 1 depicts the 6 participants enrolled in this thesis study. n = number of participants.

This study revealed four themes which iteratively built upon each other. The themes are depicted in *Figure 3* as (a) scaffolding existing components of professional education programs form a base for client-centred development, (b) an evolutionary process to internalizing client-centredness, (c) IP discussion with stories enhances client-centred development, and (d) a reflective process to developing client-centredness.

5.3.1 Scaffolding existing components of professional education programs forms a base for client-centred development. Results clearly indicated that a combination of classroombased and practice experience learning opportunities provided in existing professional education programs build upon one another to create a base for healthcare students to develop clientcentredness. To become client-centred, students must be taught sufficient client-centred knowledge and skills, coupled with the chance to repeatedly try using what they have learned within context, until the knowledge and skills begin to feel like a natural part of professional practice.

Figure 3. Developing client-centredness. This figure illustrates the four themes that iteratively built upon each other as healthcare students developed client-centredness.



Classroom-based experiences helped students to grasp notions of client-centredness early in academic preparation. Students described being taught definitions, concepts, and statistics related to client-centredness and how client-centredness fits with evidence-informed practice. Didactic teaching opportunities were particularly valuable early in academic exposure. B.R. stated in focus group two, "prior to this month, we'd just been taught umm, definitions, and just like knowledge on client-centredness." P.K. explained that being taught definitions and concepts of client-centredness was important as foundational learning, "you need enough to understand, just to learn through lectures and stuff, oh, you want to be client-centred."

Students began to relate client-centred concepts to models and theories they were learning about in the classroom. Lectures, literature, and assignments were described by students as methods used to teach them about client-centred theory and skills. Some but not all students

were exposed to multiple disciplinary perspectives of client-centredness. For example, B.D. stated that in her program, she had an assignment which prompted her to review literature from multiple disciplines about client-centredness, and during this process, she learned that "a lot of the ideas are often similar, like respect... honesty... shared-decision-making and... consent, but... the way that they're used sometimes are very different."

Explicit lessons regarding client-centredness were combined with implicitly embedding client-centred knowledge in broader professional learning. For example, J.P. described that while she may not have been overtly given a singular definition of client-centredness, she knew that client-centredness included, "making sure the patient is involved... throughout the treatment process... always taking into account their preferences... and... always tailoring patient-specific recommendations." Students recounted developing care plans or partaking in skills labs as opportunities they had been given to begin developing their client-centredness. Teaching and practice focused on skills for fostering therapeutic relationships such as communication and interviewing skills. Students worked to hone their abilities to ensure informed consent/choice and engage clients in treatment processes to promote best outcomes. B.D.'s comments, however, spoke to student interest in more explicit focus on client-centredness during classroom-based learning:

We practice on each other, like how to assess somebody for a wheelchair, or teach somebody how to use a walker... but never, 'how was my client-centredness?' It was 'how did I perform this skill, and what should I change?'... it's never directly, 'was I client-centred in that interaction?'

Since no two experiences in healthcare will be exactly alike, practice experience provided opportunity for students to increase understanding of client-centred concepts and to apply client-

centred skills in unique ways. B.R. explained how she was gaining opportunity to apply client-centred theory in practice, "now, with seeing clients actually, and using that knowledge now hands-on, I feel like I understand client-centredness a lot more. Being able to now apply it."

Learning advanced as students were given increasing opportunities during practices experience to use the client-centred knowledge and skills they were acquiring. Exemplified by M.G., students began to take classroom-based client-centred knowledge to the field where increasingly complex client-care interactions provided situations for students to reflect upon their developing client-centredness:

All of these lists that you memorize... you know them, but you don't really know what to do with them. You just kind of have them. And then once you kind of actually start, kind of interacting with patients, and getting the really difficult situations... that are actually real life... you kind of start to actually see, like, "no-no, I believe that we need to do this!" And you start actually seeing the patient for like, a person, rather than a question that you gotta go through the list in your mind for.

Practicing in the classroom was viewed by students as predictable and therefore needed to be paired with practice experience learning in the field. J.P. explained, "our standardized patients are trained to respond well to that but umm, again, that's standardized and controlled."

B.D. highlighted the value she placed on practice experience for enhancing client-centred development, explaining in the focus group that she perceived practice experience to be, "where people really develop their ideas of client-centredness."

As students made comparisons between different types of prior learning experiences, they explained that classroom-based learning was predominantly uniprofessional, whereas practice experience provided an essential venue for IP development of client-centredness. Students

described that opportunities to try using a client-centred approach were best completed with real people in need of care in IP practice environments. B.R. explained, "I feel like the more experience you get with different situations... the more better you get at providing client-centered care." This was in contrast to uniprofessional classroom-based practice opportunities which students described as predictable and lacking of the context needed to deepen understanding of client-centredness. Practice experiences provided necessary variability for students to learn about the IP collaborative nature of client-centredness, as M.G. explained:

That part isn't really taught in the classroom because... it's ya, your profession, this is how you're going to do it!... Versus in the hospital where... it's interesting to see, kind of like how to maneuver yourself within a team, umm, to still keep your focus on the patient but get everything done that you need to.

5.3.2 An evolutionary process to internalizing client-centredness. Students deepened and expanded their understanding of client-centredness over the course of their academic preparation and across the sequence of focus groups. Discussion reflected an understanding of client-centredness that shifted from a conceptual perspective to an internalized attitude and value.

Early in academic preparation, students described client-centredness as a cluster of concepts that they were trying to memorize and an assortment of skills that they were working to master. As M.G. reflected on her early learning about client-centredness, she stated that she recalled thinking, "kay, client-centred care... that's page 42 in the textbook." Students were taught to gather social, medical and intervention history while seeking to understand the client's cultural, social and physical environments. Students understood that a client-centred care provider would try to learn about client values and beliefs.

Students were taught to use client-centred communication skills to build and maintain a trusting therapeutic relationship with clients as they endeavoured to become client-centred. Students reported being taught to interview, observe and gather information from the client, support systems and from the IP team. They reported being taught verbal and non-verbal communication skills. Conceptually, students understood that to be client-centred they must internalize general qualities such as making themselves approachable and presenting themselves as open-minded. Students explained that client-centredness seemed straight forward when they first learned about it in the classroom. For example, P.K. shared that early in her academic preparation, as she was taught about client-centredness, she thought

Okay, ya now, that's fine, like I'll for sure like, be great at it and know exactly what to do. And then when you get on the floor and you have like a huge list of things you need to accomplish in a short period of time, you really realize how you can balance getting all the things you need to get done, but also making sure that the client isn't just sitting there the whole time, and you're not interacting with them.

Students reflected upon and revised their understanding of client-centredness in a continuous cycle as learning opportunities layered upon one another. In the second focus group, when students were asked how they would describe client-centredness, P.K. stated, "I think it's definitely evolving, really learning client-centred care, as opposed to just doing things that we learned how to do."

Maturing understanding of application of theory to practice was evident as students discussed at length how client-centred care meant tailoring care based on client preferences, motivation, history, context, age or gender. Opportunities to apply a client-centred approach in practice fed the students' growing appreciation of the magnitude of possible ways to tailor client-

centred care such as altering communication or adjusting the dosage, products, plans, programs, tools, resources, or supports recommended. Students discussed that client motivation, confidence in care plans, and comfort may be enhanced through compromising, problem-solving and matching resources to client needs.

Empowering the client to make informed decisions was conceptually understood by students, however, the act of sharing power and decision-making emphasized for students the high degree of moment-to-moment reflection required to enact client-centredness. Students described situations whereby client-centredness was experienced as more complex than the direct application in practice of the knowledge and skills they had been taught:

I didn't like, expect... even when someone like comes in to the hospital and they've been in a car accident. Whether or not you save them is kind of their choice... you could want to be like... I'll do A, B, C and D, and you'll be fine... sometimes it's about like understanding like, 'oh they know that, and they still don't want you to help them', and you have to kind of like, be okay with that (M.G.).

A more profound level of respect for the expertise of clients began to develop as students endeavored to ensure they maintained active partnerships with their clients as they practiced care provision. Occurrences were reflected upon by students, whereby they took note of differences in their opinions about recommended courses of treatment compared to client opinions. Students discussed a softening of their interpretation of following assessment and treatment protocols as their confidence built for enactment of a client-centred approach to care provision:

You just get more confident with being client-centred as you progress... You have like a treatment algorithm that's... the gold standard, but it may not apply to the patient's preference. So, I guess as you progress in your studies... you feel more confident in

straying away from the algorithm to meet the patient's standards... like not following the rules, but still... considered an effective treatment (J.P.).

From being taught knowledge and skills in the classroom and initial awkward application of theory to practice, there was evidence of increasing frequency and eloquence of client-centred care provision as students moved toward becoming client-centred care providers. B.R. stated in the second focus group, "Ya, I definitely think, see it now as, just like an everyday thing. Just to provide the client-centred care to each individual."

Reflection upon personal values and beliefs was apparent as students explored becoming a client-centred clinician as opposed to simply practicing what they had been taught to do. B.R.'s tone of voice emphasized the words "I believe" as she explained to the group, "we're taught that every, anything, or *I believe* that anything that we do when we're in the clinic working, everything is client-centred." Furthermore, M.G. underscored her ambition to become a client-centred healthcare provider:

I will obviously want to identify as like a good RT when I go out into practice... I used to think that that was just like, oh you have all your skills, like you can draw blood really easily, you know all your numbers off the top of your head... and that's it... Kind of throughout the years, you learn that, like, well, you can have all of that and still be a bad RT if you don't make like client-centred care part of how you actually practice yourself.... You could have all the skills and still be considered a terrible clinician if you don't have that be a part of your... frame of reference.

As students progressed in their academic preparation they reflected upon personal growth. Students who in the first focus group described client-centredness as an entity outside of themselves, progressed to describing client-centredness as a part of their very being. For example

in the second focus group, J.P. proudly proclaimed, "I feel like we're becoming those people... So that's kind of cool to go from like the classroom to being that person." Students were prompted to consider how they believed client-centredness fit within professional identity, and A.O. explained, "I think it's really interesting how like, patient-centred care has kind of woven into your professional identity right as like healthcare providers." Students discussed adoption of a client-centred attitude and set of values that had become difficult to separate from other parts of their personal and professional identity. They discussed thinking and living in a client-centred way both in- and outside of professional practice. B.D. concluded by summarizing:

For us, it's been so drilled in, like everything you do needs to be client-centred, every model that you use, every treatment plan that you make, that it's almost become an identity of itself beside the OT identity. Like, I am client-centred and I'm also an Occupational Therapist. Umm, as well as I'm a client-centred occupational therapist. Just because it's been so hammered home, this is so important. And it improves client outcomes and so on and so forth.

5.3.3 IP discussion with stories enhances client-centred development. Healthcare students learned with, from, and about each other when developing client-centredness, and focus groups provided a constructive IPE venue for learning. Focus groups provided a forum for students to discuss the learning opportunities of their professional education programs and the evolutionary process of internalizing client-centredness. J.P. explained, "I guess it's very encouraging to hear that umm, client-centredness is helping people in their practices."

Stories were used by students to explore client-centredness in a way that built confidence and furthered professional learning beyond the preparation of participants' uniprofessional program experiences. Stories of practice experiences were easily recalled by students as key

learning encounters, and students were keen to share those stories in the focus group forum.

M.G. explained how she collected stories to tell at the focus groups, "I was writing it like on the papers I had in my pocket during clinical... I'm like, 'oh that's a good story!'... I would kind of jot it down."

Lively discussion occurred as stories were used by students to share the many ways care providers of different disciplinary backgrounds apply client-centredness in practice. The following conversation between P.K. and M.G. illustrates how stories were a powerful means of helping healthcare students understand the scope of client-centred care and the breadth of application of client-centredness in various practice settings and scenarios:

P.K.: "You were just saying with like the whole Do Not Resuscitate or Resuscitate, and...I just kind of thought, oh man! Like that's a much bigger stake than say us, where it's like, oh, do they want fluoride or not?"

M.G.: "Ya."

P.K.: "It's interesting to see kind of the scope of how people use client-centred practice...it can be something so little that you're deciding, or something that's quite a big deal. So it's sort of interesting to see how different faculties use it..."

M.G.: "Ya...you were talking about fluoride treatment... So I think that's it's really cool to see that, you still use it in the same capacity even for the little things. Like nothing is too little to like not have client-centred care in it."

Digital stories used in the focus groups to facilitate discussion about application of clientcentred knowledge to proposed care provision helped students to understand client emotions and holistically reflect upon the person in the story. In contrast, students explained that paper-based scenarios in the classroom or chart reviews during practice experiences tended to prompt a focus on treatment of a health condition rather than the whole person. While paper-based case studies were considered less effective learning tools than digital stories, students stated that discussion of a common client story remained as an important client-centred development tool in an IPE learning environment; for example, A.O. expressed, "you know, everybody had some individual stories right, and then we all kind of developed these new ideas about patient-centredness, and then we get to apply as a group to one specific case." By assuming a client-centred lens together in the IP groups, students demonstrated increased willingness to consider need for healthcare outside of their discipline-specific scope of practice and students explored the client-centred nature of IP collaboration and consultation.

As students learned with, from, and about each other, they realized that client-centred care provision was an IP collaborative effort and they explored how various disciplines described and enacted client-centredness in practice. P.K. expressed how she appreciated learning from the other students in the focus groups "how each department kind of uses it and how they use it in terms of what exactly they do on a daily basis." Students discussed disciplinary similarities and differences in of providing care with a client-centred lens, and B.R. stated, "I think it's also interesting how, we all kind of look at client-centredness the same and apply it to our fields in very similar manner... I thought it could have been.... different." Students agreed that IP collaboration and consultation may improve client-centred care provision. They shared with each other their experiences of navigating an IP team, while employing client-centred values, within the complexities of professional practice.

Exploratory, face-to-face, IP discussion in the non-judgmental focus group environment was a key feature to learning that enhanced existing professional education program opportunities, as student development of client-centredness evolved. Students in this study had

varied exposure to other IP learning opportunities as part of their professional education programs. Although not specifically cued to compare the study's focus group discussions to other IP learning opportunities, students made comparisons to highlight learning strategies they believed best facilitated developing client-centredness. The open nature of discussion in the focus groups encouraged honest reflection by students. While graded assignments were used in other IP learning environments as a means of assessing reflective learning, students perceived that the structure of assignments often hindered genuine reflection. In contrast, the IP conversation in the focus groups was described by students as a constructive way of learning, as P.K. stated, "like here it's a bit more organic, we're having more of a conversation and a dialogue." Students perceived that the focus groups effectively fostered healthy IP relationships where they felt confident to build upon each other's ideas. Students validated one another's experiences and expressed appreciation when the discussion helped them to connect clientcentred knowledge in new ways. A.O. summarized by stating, "developing your patient-centred umm mindset comes from interacting with other health professionals or soon-to-be health professionals."

In addition to highlighting the perceived benefit of free-flowing dialogue when learning about client-centredness in the focus groups, students drew attention to the type of discussion they found most beneficial. B.R. stated, "I find that talking in person is a lot better than the online discussion posts", and she went on to explain that "when you're typing... it feels like there's more of a right and wrong answer." Similarly, A.O. emphasized some of his challenges with online discussion such as having group members respond very late at night or contributing just minutes before the closing time of the online discussion forum. A.O. perceived that confirming meaning was more easily achieved in face-to-face discussion when compared to

online discussion posts, as he explained his experience of online posting, "...then someone replies to it like 2 hours later, and you're interpreting what they meant rather than just you know, asking them, and clarifying."

Finally, students described a cyclical nature to learning with, from, and about each other as they came together in the focus group discussions at three points in time over five months, with return to their professional education experiences in between. For example, B.R. responded to an idea J.P. brought forward about client-centredness by stating, "that kind of like stuck with me, and I feel like I'll kind of like think about that, as I'm in the clinic." The focus group discussions stimulated students to expand their ideas about client-centredness, leading A.O. to conclude during the final focus group by stating, "this is where all our constructive thoughts come from... a lot of our ideas have come from these groups." As healthcare students discussed client-centredness as a shared professional attitude and value, they generated increased desire to return to practice experience as client-centred healthcare providers, knowing they would enact client centredness as an IP team rather than alone.

5.3.4 A reflective process to developing client-centredness. An expanded reflective process supported development of client-centredness, and likewise, the reflective process was enhanced by IP discussions about professional program experiences while students were internalizing client-centredness. Currently, professional education programs prompt students to reflect primarily upon their actions, however, the students in this study engaged in a process of reflecting at multiple points in time and in several ways during their client-centred developmental process. Students in this study reflected on client-centredness before interactions with clients, during client-care, after-client care, and beyond client-care to consider their evolving client-centred identities.

Reflection before client-care referred to how students thought about client-centredness and demonstrated motivation to provide client-centred care in upcoming client-care interactions. B.D. explained that learning to be client-centred was a choice because, "it depends on how you come at it... it's your attitude... maybe is, I'm going to look at this as a learning opportunity, or I'm going to look at this as a challenge." During practice experience portions of professional education, there are high expectations for students to demonstrate technical skills. Students explained that they were not consistently cued by practice experience educators to demonstrate client-centred values. The focus group discussions cued students to think about clientcentredness before entering client-care situations, as B.R. stated, "I heard like a lot of different terms like holistic care and... those things kind of stuck out to me... when I was just in the clinical like setting." While students initially perceived that the concepts of client-centredness were simple and aligned with the general caring nature of people who chose healthcare as a career path, students observed that the application of theory to practice could be incredibly complex. Students made it clear that throughout their participation in this study, they were more overtly attending to client-centredness.

Reflecting before client-care tied closely to in-the-moment reflection, as students purposefully considered the client-centred knowledge and skill they were gaining and then practiced implementing what they were learning. Moving client-centredness to the forefront of their minds by reflecting in-the-moment was considered an important step in development of client-centredness. P.K. explained that if client-centredness was not made obvious, "it can be kind of easy to forget to be client-centred when you're trying to accomplish all these other things at the same time." The moment-to-moment decision making that occurred during any given client-care interaction was guided by a client-centred lens as these healthcare students progressed

in their professional education preparation. Practice experience was described by students as more than just the chance to try out the client-centred skills they had been taught in the classroom. Reflection in-the-moment occurred during practice experience and was perceived by students as contributing to their client-centred development. For example, M.G. told a story about the complexity of client-centredness in moments of life or death decision making; she explained that to be client-centred, you must provide care in a "grey area." Reflection in-the-moment that is client-centred may involve stepping back from client-care, as M.G. went on to explain how sometimes, "you almost pull back the care that you give, in order to let the patient like, think out what they need. And that's kind of how you end up centering them."

Reflection upon provision of client-care was familiar to students as one stage of a reflective process that occurred at multiple time points and in numerous ways to enrich client-centred development. Professional education programs frequently built reflection into curriculums by asking students to reflect on their learning experiences immediately or shortly after they had taken place. Reflection upon provision of client-care cued students to connect practice back to theory. Students described being asked to complete various reflection-based assignments during practice experience blocks. Furthermore, as part of this study design, students were asked to maintain a reflective journal to help them deliberately attend to client-centredness. P.K. provided an illustration of how reflection upon her client-care actions augmented her client-centred development:

We do have an assignment where we had to record ourselves giving the umm, presentation of the care plan. We had to critique a whole week. You do a lot of things you don't realize you're doing... I was explaining something to her [the client] and I wanted to make sure that she understood what I was explaining and instead of letting her

talk, I kind of said, "you understand right? Like you said okay", and I wasn't really letting her respond to that. So, I think that was kind of really eye opening for me cause I was able to see, "oh, I didn't let her respond" and I just kind of assumed she knew what I was talking about, or understood and agreed with it.

Reflection beyond care provision was the stage in the reflective process whereby the students engaged in self-exploration considering personal and professional values and beliefs about client-centredness. Reflection beyond care provision was intricately connected to the process of internalizing client-centredness. Focus group discussions cued students to openly reflect on how they perceived client-centredness fit within their professional identities. Students discussed how the non-judgemental IP discussion environment was a comfortable place for reflective exploration. B.D. illuminated the connection between reflecting beyond care provision, and internalizing client-centredness:

I almost see it as a part of my identity as a practitioner, like I'm not giving client-centred care, I am client-centred and the way that I interact... not just an aspect of the care that I provide, it's almost like a frame of reference or ah, like a lens over how I see all of the profession. Almost. Like it's just a part of me.

5.4 Discussion

In this interpretive description study, six pre-licensure healthcare students engaged in a series of three focus groups over the course of five months to explore classroom and practice experiences so researchers could advance an understanding of the development of client-centredness from the perspective of students engaged in an IPE experience. Inductively analyzed results revealed that building upon the base of classroom-based and practice experiences, healthcare students internalized client-centredness as they engaged in a reflective process which

was enhanced by IP discussion with stories. As national and international literature proposes that client-centredness develops within IP learning environments (IPEC Expert Panel, 2011; WHO, 2010), students in this study supported the view that client-centredness is a core value that can be strengthened through IP discussion and reflection.

Professional healthcare education programs are structured to provide integrated schedules including classroom and practice experiences (Rady FHS, U of M, 2019; Rady FHS, U of M, 2014), hence, it was not surprising that students explained that client-centred development required a grounding in classroom-based and practice experiences. However, the emphasis this student group placed upon the value of practice experience for developing client-centredness was greater than anticipated. Prior uniprofessional studies of client-centred development have asked students to reflect upon their practice experiences and alluded to the importance of practice experiences as learning opportunities for client-centred development (Currie et al., 2015; Ripat et al., 2013). Currie et al.'s study of student nurses highlighted that students who were active instead of passive learners during practice experience, were thereafter more insightful about client-centred care concepts. Cuing students to actively reflect on client-centredness while in the act of care provision may be key to helping students to maximally gain client-centred development opportunities from practice experiences. Ripat et al. (2013) discussed how OT students perceive a discrepancy between theoretical client-centredness and the provision of client-centred care. Those authors explained that practice experience helped students to grow to understand the fluid nature of a client-centred approach, and those authors recommended that clinician-educators take time to discuss client-centredness with students (Ripat et al., 2013). This knowledge is invaluable because it highlights the role that licensed professionals who supervise student practice experiences must play in healthcare student development of client-centredness.

Knowledge provided in the classroom by academic educators is not sufficient for producing client-centred graduates.

There was a clear evolution among this healthcare student group regarding their internalization of client-centredness as they progressed in their professional education. The students described understanding client-centredness early in their academic preparation as a collection of concepts outside of themselves. As students continued to discuss client-centredness across the series of the three focus groups they began to describe themselves as being clientcentred. The students discussed how they truly believed in the need to provide client-centred care, and they discussed how client-centredness had settled into their identity as individuals, both in, and outside of their professions. This finding was consistent with uniprofessional findings that as occupational therapy students enact and reflect on client-centredness in a cyclical fashion, they begin to define themselves as client-centred healthcare providers (Ripat et al., 2013; Ripat et al., 2014). In a large study of IP hospital employees, while a progression was not overtly described, Fix et al. (2018) did find that employees tasked with client-centred care implementation ranged in their levels of internalization of client-centredness. A range of internalization of components of professional identity is expected, as individuals will move at various rates from explicit learning of the theoretical bases of information to tacit understanding of the values and beliefs in professional practice (Cruess & Cruess, 2006). Results of this study call attention to the similar trajectory and process of internalizing client-centredness for members of multiple disciplinary backgrounds. While the specific application of client-centred knowledge and skills was diverse for participants of each disciplinary background, healthcare students engaged in this IPE learning experience shared in a common process of repeated reflection and ongoing learning to a point of internalized client-centredness.

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This study introduced three digital stories (one during each focus group) to provide a common story/case/person for the students to use as a catalyst for further discussion of clientcentredness, and surprisingly, the student researcher found that the digital stories were a useful, but non-essential teaching tool for client-centred development for students engaged in an IPE learning experience. Consistent with the literature which has suggested that stories are beneficial for learning in healthcare education (Crookes et al., 2013; Haigh & Hardy, 2011), students agreed that having a common person to discuss was a useful teaching strategy. However, the students in this study brought to the focus group discussions very rich personal stories which appeared to be more effective for cuing consideration of client-centredness in an IP group. While prior literature has suggested that digital stories are an effective teaching tool because they often elicit emotional responses and reflection (Christiansen, 2011), the students in this study required prompting to draw out reflections and emotions. Perhaps the quality of the digital stories may have impacted the usefulness of the digital stories as teaching tools, as students discussed finding the visuals of the digital stories to be distracting. Although digital stories cannot be ruled out as teaching tools that my facilitate development of client-centredness, further research is recommended to determine the specific elements of digital stories which may most prominently be beneficial for stimulating client-centred development.

The healthcare students who participated in this study brought memorable stories from their practice experiences or their personal lives to the focus group discussions. Within the focus group setting, as students reflected upon their internalization of client-centredness, the group became an IP group with a common goal, to better understand client-centredness. The WHO states that "interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improved health outcomes"

(2010, p. 7). IP collaboration and IPE efforts are considered essential to high quality clientcentred care and through deliberate efforts to create IP learning opportunities, client-centred care may be improved (Interprofessional Education Collaborative Expert Panel [IPEC Expert Panel], 2011). Internalization of the value, belief, and attitude to enact a client-centred approach in practice was strengthened by the sharing of stories and open discussion nature of the IP focus groups. Students used storytelling of their experiences in practice to help one another expand conceptualizations of client-centredness beyond the concepts students could find in a textbook. Haigh and Hardy (2011) explained that storytelling helps students to learn implicit professional values and storytelling also promotes group identity. The students in our study described increased confidence to apply theory to practice between focus group discussions because they realized that client-centredness was not unique to their discipline and that there were multiple ways to apply client-centred knowledge and skill in practice. Students discussed clientcentredness as having breadth to span from toothpaste choice to life and death decision-making. Visualizing client-centredness more broadly than their uniprofessional lens previously allowed was made possible by IP student discussions in an environment where students of multiple disciplines could establish trust with one another.

Face-to-face contact, as well as a common-focus to improve overall care, helps to increase trust among IP healthcare providers who are striving to develop IP collaborative relationships (Wener & Woodgate, 2016). Deliberately setting aside time for informal IP team discussion of real situations has been demonstrated as an effective strategy for IP teams to implement and sustain models of client-centred care where together the team could reflect and advance learning (Naldemirci et al., 2017). As educational programs strive to develop client-centredness in IP student groups, deliberately setting aside times for pre-licensure students of

various health professions, to meet in-person to discuss client-centredness, is recommended based on results of our study and existing literature. While opportunity to discuss real-life situations may be ideal, other researchers have explored alternate means of bringing students from various health professions together with a common-focus. Doherty et al. (2018) found that when students from various health professions read a common story/novel regarding experience of illness, healthcare students establish common ground with each other and are more inclined to then apply a client-centred approach during practice experience.

In our study, the content of the face-to-face, IP discussions fed back into the evolutionary process of developing client-centredness as students engaged in multiple forms of reflection to enhance what could be gained from classroom and practice experiences. Reflection was applied in a cyclical process before, during, after and beyond client-care experiences (Edwards, 2017) by students as they developed their client-centred identities. Healthcare educators strive to produce graduates who are reflective, lifelong learners (Rady FHS, U of M, 2019). However, education programs often apply reflective models in the form of assignments that focus on reflection on/after client-care interactions (Edwards, 2017). Schmutz and Eppich (2017) highlight that outcomes of reflection differ depending on the temporal focus a team has when reflecting in healthcare practice. Edwards (2017) has proposed a four-dimensional process of reflection that may be used in a continuous cycle. Through reflection before client-care, during active care provision, immediately or shortly after client-care, and beyond care provision experiences, healthcare students may achieve deepened understanding of their professional practice (Edwards, 2017). By reflecting beyond care provision experiences, students may engage in a selfexploration process that increases awareness of values and beliefs for professional identity (Edwards, 2017). Results of this study fit with Edwards (2017) four-dimensional reflective

process. Healthcare students in this study reflected upon client-centred knowledge and skill before enacting a reflective client-centred approach in-practice. Students then reflected upon provision of client-centred care while journaling and during the IP focus group discussions. Finally, students were prompted to reflect beyond care provision to explore how client-centredness fit within their professional values and beliefs as developing clinicians, which fed back into the cycle of reflecting before-, in- and on-action (Edwards, 2017). The students in this study became increasingly mindful of client-centredness as they reflected at multiple points in time and in multiple ways. Additional non-assignment-based reinforcement from educators to reflect on client-centredness before-, in-, and beyond-action (Edwards, 2017) may bolster client-centred development in healthcare students as they participate in IPE learning experiences.

Consistent with the interpretive description methodology, researchers have aimed to coconstruct an understanding of the development of client-centredness from the perspectives of
healthcare students (Hunt, 2009). Results have revealed that classroom and practice experiences
provide a base for healthcare students to internalize client-centredness which is enhanced by
engaging in IP discussions and a reflective process of client-centred development. Licensed
professionals who supervise student practice experiences should encourage all healthcare
students to reflect on client-centredness before client-care interactions, while working with
clients, after client-care and finally, beyond the experiences of the day, to consider how clientcentred care provision fits with developing IP values and beliefs. Development of clientcentredness could be enhanced if professional education programs set-aside regular predetermined times in student timetables for pre-licensure students from various health professions
to come together in IP groups to discuss stories of client-centredness in non-graded, semistructured discussion forums. Results of this study suggest that client-centredness develops in a

consistent fashion for students of multiple disciplinary professional education programs which fits well with current trends to provide more IPE opportunities. As students continue to be exposed to client-centred care as one of the six competencies of the NIPCF (Rady FHS, U of M, 2017), incorporation of results of this study into the learning experiences of the Interprofessional Collaborative Care cohorts (Rady FHS, U of M, 2016) may help to produce IP collaborative graduates with more fully developed client-centred identities.

The findings of this study are limited. Only one small group of healthcare students from one Canadian university participated. The participants demonstrated interest in the topic by their self-selection in the research study, and therefore, results may overemphasize enhanced client-centred development. Although the aim was to recruit a balanced group of participants with only one individual from any given disciplinary background, it was challenging to achieve group size without allowing unbalanced disciplinary background due to the voluntary selection process, and therefore, the group was unbalanced with higher representation of dental hygiene and pharmacy students compared to OT and respiratory therapy students. Six out of six participants attended the first two out of three focus groups, but one pharmacy student did not attend the third focus group for personal reasons. While data analysis was complicated by the lack of congruency regarding year of professional education program by each participant, the variety of stages of academic preparation broadened the scope of the focus group discussions. Analysis was completed by the first two authors who are both occupational therapists by background and therefore, results may overemphasise an OT interpretive lens.

Overall this study advanced an understanding of the development of client-centredness from the perspective of one group of pre-licensure healthcare students as they engaged in an IPE experience. Further research with other groups of healthcare students would help to confirm the

findings. Recruitment of participants from other disciplinary backgrounds should be completed to determine if the developmental process is paralleled with healthcare student groups that include a broader range of disciplines such as medicine, nursing, social work and other healthcare disciplines. Future investigations outside of Canada could be undertaken to explore transferability to areas such as the United Kingdom or the United States where client-centred care initiatives are also being advocated (Currie et al., 2014; Doherty et al., 2018). Intervention studies may be beneficial to more specifically compare face-to-face versus online discussion forums or to compare deliberately encouraging students to reflect before-, in-, on- and beyond-action versus the more typical academic requirement for students to complete reflective assignments only on-actions.

5.5 Conclusion

Reflective healthcare students engaged in IPE experiences benefit from in-person, open discussion opportunities to learn with, from, and about each other as they internalize client-centredness and move beyond the knowledge and skill-based foundations provided to them by their professional education programs. The four themes discussed as a result of this study provide educators with information about what contributes to healthcare student development of client-centredness as well as how the developmental process can be enhanced. Healthcare students value client-centredness and believe it to be a part of their professional identities. Client-centred healthcare graduates will become the licensed professionals who provide client-centred collaborative care in support of optimal health outcomes for generations to come.

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5.7 Conflicts of Interest

The authors declare no conflicts of interest.

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6.0 Discussion Regarding the Discourse of Pre-Licensure Students from Various Health Professions after Presentation of Digital Stories during Focus Groups

This interpretive description study engaged six pre-licensure students from various health professions in a series of three focus groups to explore development of client-centredness from the perspective of healthcare students engaged in an IPE experience. The literature review that prefaced the study revealed storytelling as a teaching strategy that may contribute to development of client-centredness (Paliadelis et al., 2015). Digital stories were explored as a teaching tool to kindle interest in learning (Crookes et al., 2013; Fenton, 2014), to stimulate emotional, reflective responses among students (Christiansen, 2011; Waugh & Donaldson, 2016), and to help students to connect theory to practice (Crookes et al., 2013). Therefore, one of the study questions sought to descriptively reflect upon how pre-licensure healthcare students discuss client-centredness after watching/listening to a client's digital story.

Three digital stories were developed prior to the data collection phase of this thesis research, and the digital stories were incorporated into the semi-structured focus group outlines, to serve as catalysts for discussion related to development of client-centredness. While the digital stories did inspire discussion, they were not found to be as necessary for discussion stimulation as anticipated because the research participants brought very rich stories of their own experiences to the focus groups.

Consistent with what is known in the literature about use of stories and storytelling in healthcare education (Crookes et al., 2013; Haigh & Hardy, 2011), the students in the current study agreed that having a common story/case/person to discuss was helpful as a teaching and learning strategy. Students reported finding the digital stories interesting, and the client stories were effective for cuing consideration of client-centred theory from an IP collaborative

perspective. Interestingly, during initial responses to the digital stories, students demonstrated reflection upon the person in the story more than the discipline-specific potential interventions the students could provide to the person in the story. However, students reported that there were components of the digital story format that they found distracting which took away from their ability to focus on the person behind the story. Students commented on the quality of the production, explaining for example, that stock, rather than real pictures, decreased their ability to focus on the details of the story. Further research may be completed to review the influence of digital stories for the development of client-centredness, however, high quality, genuine stories may be essential to truly capturing the benefits of digital stories over other case-study formats for stimulating IP discussion about client-centredness.

Prior literature suggested that digital stories stimulated an emotional response in student nurses and provoked reflection (Christiansen, 2011), however, the students in the current study revealed limited spontaneous emotional responses to the digital stories and cuing was required to reflect upon the stories. Generating discussion after digital story presentation in the first focus group was somewhat challenging, however, this may have been reflective of the multidisciplinary group of healthcare students who were still working toward establishing trust with one another in the focus group setting. The semi-structured focus group guide was modified for the second focus group to include a worksheet with questions to try to elicit further emotional engagement and reflection upon client-centredness in response to the digital story presentation. Additional prompting may have generated increased emotional engagement and reflection, as evidenced by students referring back to the second digital story during the third focus group; however, the second digital story may also have increased emotional engagement and reflection on its own by nature of the story itself in comparison to the first and third digital stories. Again,

students discussed distracting component of the digital story format that they perceived may have impacted emotional engagement, such as being distracted by the visuals even when the students felt emotionally engaged with the voice component of the digital story format. While the student researcher would not rule out digital stories as a beneficial teaching tool for the development of client-centredness, further digital story development and research may be required to determine which digital stories and what methods of presentation are most effective.

7.0 Conclusions

The purpose of this study was to advance an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students as they engaged in an IPE experience. Results revealed that reflective pre-licensure healthcare students learn with, from and about each other by sharing stories in an open IP discussion forum as they internalize client-centredness. The identified teaching and learning strategies as well as reflection and internalization processes iteratively built upon each other as client-centredness developed in pre-licensure healthcare students engaged in an IPE experience. This study supported the view that client-centredness is a core IP value (IPEC Expert Panel, 2011; WHO, 2010) and the study revealed that by engaging in a multidimensional reflective process in IP student groups, students move beyond knowledge- and skill-based foundations as they internalize client-centredness.

Uniquely, the pre-licensure healthcare students in this study placed emphasis on the importance of practice experience for developing client-centredness. Prior uniprofessional literature has alluded to the significance of practice experience for developing client-centredness. For example, prior research with student nurses has identified that active learners during practice experience developed increased client-centred insight compared to passive learners (Currie et al., 2015), and research with OT students revealed a discrepancy between client-centred theory and the application of theory in practice (Ripat et al., 2013). This thesis combined with prior literature highlights the role clinician-educators should play in development of client-centredness by cuing students to reflect in multiple ways during practice experience portions of professional education preparation. Student development of client-centredness should not be left solely to classroom-based learning opportunities or the teachings of academic educators.

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This thesis revealed that internalization of client-centredness is an evolving process for pre-licensure healthcare students despite differences in specific application of client-centred skills and knowledge for students of varying health professions. Uniprofessional literature previously revealed that OT students move through a process of internalization of client-centredness (Ripat et al., 2013; Ripat et al., 2014), and IP literature in post-licensure IP healthcare employees has revealed a range of levels of internalization of client-centredness (Fix et al., 2018), however, the results of this thesis demonstrate consistency in the process of internalizing client-centredness in a pre-licensure healthcare student population as they engage in IP collaborative learning. Results of this thesis suggest that clinician-educators may expect students of varying disciplinary backgrounds to be moving through a process of internalizing client-centredness and therefore should feel confident to cue students of different disciplinary backgrounds, to reflect on client-centredness in situations of IPE.

Storytelling in IP groups may strengthen internalization of the value, belief, and attitude to enact a client-centred approach to practice, and storytelling helped the pre-licensure healthcare students in this thesis study to expand conceptualizations of client-centredness. While prior literature has suggested benefits to storytelling when developing professional values (Haigh & Hardy, 2011), and other studies have used common stories to bring IP students together with a common client-centred focus (Doherty et al., 2018), this thesis study uniquely points to the value of encouraging healthcare students to collect and share stories with each other in IP groups, about client-centred practice experiences. If licensed professionals who supervise student practice experiences use storytelling to teach, if they encourage students to collect stories and they set aside time for IP student groups to share stories of client-centredness, educators will contribute to the development of client-centredness in pre-licensure healthcare students.

Digital stories may have benefits in terms of encouraging IP collaboration, when compared to paper-based scenarios in the classroom or chart-reviews during practice experience, however, the quality of the digital story may impact emotional engagement of students. While prior literature has suggested that digital stories provide an emotional, reflective, transformative learning resource for students (Christiansen, 2011), results of this thesis study suggest that further research is required to better understand how digital stories may be optimally used as teaching tools for the development of client-centredness in pre-licensure healthcare students.

Face-to-face, open, IP discussion in a non-judgmental environment at regularly scheduled intervals with the same IP group supported learning with, from, and about each other regarding client-centredness. Developing trusting IP collaborative relationships necessitates face-to-face contact according to prior research with IP healthcare providers (Wener & Woodgate, 2016), and purposefully scheduling time for relaxed IP team discussion has been demonstrated as an effective method for IP teams to advance client-centred care models (Naldemirci et al., 2017), however, this thesis research underscores the need for face-to-face discussion time for client-centred development of pre-licensure healthcare students as they engage in IPE experiences. The results of this thesis study could be incorporated by academic educators involved in the planning and scheduling portion of IPE so that multiple points of in-person contact are pre-established with IP student groups where client-centredness may be explored.

As it should, reflection after care provision in the form of assignments already plays an important role in healthcare education (Edwards, 2017), however, results of this thesis study suggest that using reflection in a cyclical process before, during, after, and beyond practice experiences may enhance development of client-centred identities and internalization of client-centredness in pre-licensure healthcare students. Edwards (2017) has advocated for a four-

dimensional process of reflection in nursing education, and literature regarding IP team reflection has suggested that reflection outcomes will change according to timing of reflection (Schmutz & Eppich, 2017). This thesis research can be viewed by clinician-educators as a reminder to cue students to reflect on client-centredness at multiple points in time and in multiple ways to support development of client-centredness in pre-licensure healthcare students during practice experience portions of education.

This interpretive description study has advanced an understanding of the development of client-centredness from the perspectives of healthcare students engaged in an IPE experience. There are several limitations to this study which should be acknowledged. This study was with one small group of healthcare students from one Canadian university, and there was an unbalanced number of participants from various disciplinary backgrounds and therefore results may not hold true for students of other settings or disciplinary backgrounds. Participants were self-selected and their interest in the topic of client-centredness and/or IP collaboration and IPE may overemphasize an enhanced developmental process. One participant did not attend the final focus group. Finally, the student researcher and her study advisor are both occupational therapists by background and therefore results may overemphasize an OT viewpoint.

Further research in several areas is recommended. Recruitment of participants from other disciplinary backgrounds would help determine if the developmental process was the same in IP student groups with a broader range of disciplinary backgrounds, and furthermore, repeating the research with several groups of healthcare students of various disciplinary backgrounds would help confirm the findings. Transferability could be explored by replication of this study at other Canadian universities and outside of Canada. Intervention studies may further explore the value of digital stories for client-centred development and they also may allow comparison of elements

of this study, such as comparing face-to-face versus online discussion forums for the development of client-centredness. Further exploration of various models of reflection and their impact on client-centred development may also be considered.

This thesis study has advanced an understanding of the development of client-centredness from the perspective of pre-licensure healthcare students engaged in an IPE experience. As a professional value that has been encouraged among IP healthcare providers and as a competency of the NIPCF, client-centredness is a part of the "knowledge, skills, attitudes, values and judgements" (CIHC, 2010, p. 8) emphasized in IPE (Rady FHS, U of M, 2017). University educators as well as post-licensure clinician-educators may benefit from the knowledge gained in this study about the teaching and learning strategies as well as the internalization and reflective processes that iteratively build upon each other for development of client-centredness. Enhanced education may lead to healthcare providers entering professional practice with more fully developed client-centered identities for the provision of improved IP collaborative client-centred care.

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Appendix A

Email to College and Faculty Contacts for Recruitment

Date		
Hello	_,	

My name is Denyse Blanco and I am a Master of Science (Rehabilitation Sciences) student currently conducting a study to advance an understanding of **the development of client-centredness from the perspective of pre-licensure interprofessional (IP) healthcare students**. Client-centredness is the professional value, belief and attitude that guides an approach to patient-centred, person-centred, or family-centred practice. This study has received approval from the University of Manitoba (U of M) Health Research Ethics Board (HREB).

I would like to request your support with recruiting pre-licensure healthcare students as study participants. A maximum of eight participants will be asked to participate in this study. Each participant will be enrolled in a different discipline out of a potential ten healthcare disciplines at the U of M during the 2017-2018 academic year.

Participants will be asked to partake in three IP focus groups, each lasting approximately 90-120 minutes and occurring approximately eight weeks apart. Focus groups will occur at the U of M Bannatyne Campus at a time that is convenient for the participants. During these focus groups, participants will be asked about how they describe and learn about client-centredness. Participants will be asked about how they believe client-centredness fits within professional identity, values, and theories. Participants will be asked about the factors they believe have contributed to their development of client-centredness and as a group of IP healthcare students I am aiming to increase understanding of how they learn with and from each other while discussing client-centredness. Participants will watch/listen to three different client digital stories (one per focus group). Watching/listening to these digital stories will help provide some content for discussion related to client-centredness. Participants will be provided with some information about reflective journaling. Reflective journaling is an optional component of participation in this study that participants may choose to use to help themselves to deliberately attend to experiences of client-centredness between focus group one and focus group three. To qualify for participation in this study, participants must have opportunity (as part of their regular academic preparation) to participate in at least one practice experience (such as fieldwork, placement, clinical rotation or practicum) between focus group one and focus group three. Focus group one is anticipated to occur in November 2017. Focus group two is anticipated to occur in January 2018. Focus group three is anticipated to occur in March 2018.

All focus groups will be digitally audio recorded and transcribed for qualitative analysis. The knowledge gained in this study may be used to inform teaching client-centredness and may ultimately contribute to development of client-centred healthcare providers. As an IP competency described in the National Interprofessional Competency Framework (Canadian Interprofessional Health Collaborative, 2010) used at the U of M in the Rady Faculty of Health Sciences (Rady Faculty of Health Sciences, University of Manitoba, 2016), this study which will

increase understanding of client-centred development may ultimately contribute to overall improved health of clients.

I have attached a recruitment poster to this email, titled "Invitation to Participate in a Research Study." I am requesting you support my study in two ways:

	$-2j \approx 0$
•	Please post the recruitment poster in your student locker/information/ shared areas.
•	Please provide me with a name and contact information for the student rep in (fill in program of study). I will contact the student rep by phone and/or email to request their assistance with recruitment based on their knowledge of information sharing methods in (fill in program of study); for example, by the class rep posting the poster on the class social media site, or by the class rep
	announcing the study before/after a class and then directing interested
	participants to the recruitment poster.
	If you have any questions about this study, please contact me by email at or my study advisor, Dr. Jacquie Ripat by email at or by phone at Thank you.
Sincer Denys	ely, e Blanco
	References

Canadian Interprofessional Health Collaborative. (2010). A national interprofessional competency framework. Vancouver, BC: College of Health Disciplines. Retrieved from http://www.cihc.ca/files /CIHC_IPCompetencies_Feb1210.pdf

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Appendix B

Invitation to Participate in a Research Study

October 11, 2017

- Have you been talking, thinking or learning about **client-centredness** (the professional value, belief and attitude that guides your approach to patient-centred, person-centred, or family-centred practice)?
- Do you enjoy learning in interprofessional groups?
- Do you want to contribute to a study that aims to inform educational approaches to encourage development of client-centredness in future healthcare students?

My name is Denyse Blanco and I am a Master of Science (Rehabilitation Sciences) student currently conducting a study to advance an understanding of **the development of client-centredness from the perspective of pre-licensure interprofessional (IP) healthcare students**. This study has received approval from the University of Manitoba (U of M) Health Research Ethics Board (HREB). My study advisor, Dr. Jacquie Ripat, will oversee the study.

I would like to listen to your perspective. This study will take place between November 2017 and March 2018. Three focus groups will take place at the U of M Bannatyne Campus and will be scheduled at a time that is convenient for all participants. Study participants will receive an honorarium for their involvement in the study and refreshments will be provided during the focus groups. I am looking for research participants who:

- Are registered in a pre-licensure healthcare program at the U of M
- Are available to participate in three IP focus groups, each lasting approximately 90 to 120 minutes, and occurring approximately eight weeks apart
- Will (as part of your regular academic preparation) have at least one practice experience (such as fieldwork, placement, clinical rotation or practicum) that will occur between the first and third focus groups

If you would like more info	ormation about this study, or are willing to
participate in this study, p	please contact Denyse Blanco by email at
	or my study advisor, Dr. Jacquie Ripat by
email at	or by phone at
Thank you for cons	idering participating in this study.

Appendix C

College and Faculty Contacts

Rady Faculty of Health Sciences (Rady FHS) and Faculty of Social Work

University of Manitoba (U of M)

2017-2018 Academic Year

Degree/Program College Faculty	Department Head or Representative and Contact Information
Bachelor of Nursing College of Nursing Rady FHS	Undergraduate Programs Assistant
Bachelor of Respiratory Therapy College of Rehabilitation Sciences Rady FHS	Program Assistant
Bachelor of Science (Pharmacy) College of Pharmacy Rady FHS	Office Assistant As per Email sent 2Aug2017 to confirm most appropriate contacts, my recruitment requests should be sent to (a) Program Administrator and Student Advisor and (b) pharmacy@umanitoba.ca
Bachelor of Social Work Faculty of Social Work	Program Assistant
Diploma in Dental Hygiene College of Dentistry – School of Dental Hygiene Rady FHS	Office Assistant
Doctor of Dental Medicine College of Dentistry Rady FHS	Student Advisor & Student Services Coordinator:
Master of Occupational Therapy College of Rehabilitation Science Rady FHS	Program Assistant
Master of Physical Therapy College of Rehabilitation Sciences Rady FHS	Program Assistant
Master of Physician Assistant Studies Max Rady College of Medicine Rady FHS	As per phone conversation (August 31, 2017) with Administrative Coordinator, the Clinical Year 2 recruitment request would be best directed to the Program Director
Medical Doctor (MD) Program Max Rady College of Medicine Rady FHS	Office Assistant Research Assistant to the Associate Dean Student Affairs, UGME

Appendix D

Participant Screening Questionnaire

Date: _	
Hello _	
study. N student. approace conduct centred working received	Thank you for taking the time to contact me and for your interest in participating in my My name is Denyse Blanco and I am a Master of Science (Rehabilitation Sciences) Client-centredness is the professional value, belief and attitude that guides your h to patient-centred, person-centred, or family-centred practice. I am currently ing a qualitative study to advance an understanding of the development of clientness from the perspective of pre-licensure interprofessional (IP) healthcare students. I am gunder the guidance of Dr. Jacquie Ripat and my thesis committee. This study has a approval from the University of Manitoba Health Research Ethics Board. To ensure we see best fit of participants for our study, please answer the following questions:
What pi	re-licensure healthcare program are you presently enrolled in? (Check one)
	Bachelor of Nursing Bachelor of Respiratory Therapy Bachelor of Science (Pharmacy) Bachelor of Social Work Diploma in Dental Hygiene Doctor of Dental Medicine Master of Occupational Therapy Master of Physical Therapy Master of Physician Assistant Studies Medical Doctor (MD) Program
What yo	ear of your pre-licensure healthcare program are you presently enrolled in? one)
	Year 1 Year 2 Year 3 Year 4
•	available to participate in three focus groups between the dates of November 2017 and 018 (Each focus group is expected to be between 90 and 120 minutes long)? (Check one)
	Yes No

that apply)
 □ October 2017 □ November 2017 □ December 2017 □ January 2018 □ February 2018 □ March 2018 □ None
What is your age? (Check one)
 □ 18 to 25 years □ 26 to 35 years □ 36 to 45 years □ 46 years or older
What is your gender? (Check one)
 □ Male □ Female □ Prefer not to disclose
What is the best method to contact you if you are selected as a study participant?
 □ Phone Call □ Phone Call with Voice Mail □ Text Message □ Email
Please provide your contact information:

As part of your current academic preparation, when will you have opportunity to participate in practice experience (such as fieldwork, placement, clinical rotation or practicum)? (Check all

Thank you for answering the above questions to help me determine if you are the best fit to be a participant in this study. Please return your completed form by one of the following methods:

Mail or in person to: College of Rehabilitation Sciences

R106-771 McDermot Avenue Attention: Jacquie Ripat University of Manitoba

Winnipeg, Manitoba R3E 0T6

Email to: Denyse Blanco

I will contact you within the next two to three weeks with further information.

Sincerely,

Denyse Blanco

Appendix E

RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM Focus Group

Title of Study: Development of Client-Centredness: Perceptions of

Interprofessional Healthcare Students

Principal Investigator: Denyse Blanco

Graduate Student: Master of Science (Rehabilitation Sciences)

College of Rehabilitation Sciences Rady Faculty of Health Sciences

University of Manitoba R106-771 McDermot Avenue Winnipeg, Manitoba R3E 0T6

Email:

Co-Investigators: Dr. Jacquie Ripat

Associate Professor

College of Rehabilitation Sciences Rady Faculty of Health Sciences

University of Manitoba

Email:

Dr. Pam Wener

College of Rehabilitation Sciences

University of Manitoba

Dr. Christine Ateah Faculty of Nursing University of Manitoba

You are being asked to participate in a research study involving a focus group. Please take your time to review this consent form and discuss any questions you may have with the study staff, your friends or family before you make your decision. This consent form may contain words that you do not understand. Please ask the study staff to explain any words or information that you do not clearly understand.

This research study is being conducted in partial fulfilment of the degree requirements for the Principal Investigator's (Denyse Blanco's) Master of Science (Rehabilitation Sciences) degree. Individuals listed as co-investigators are the student's study advisor (Dr. Jacquie Ripat), internal thesis committee member (Dr. Pam Wener) and external thesis committee member (Dr. Christine Ateah). The results of this study will be published in a thesis, which is a public document.

Purpose of this Study

This research study is being conducted to advance an understanding of the development of client-centredness (the professional value, belief and attitude that guides your approach to patient-centred, person-centred, or family-centred practice) from the perspective of pre-licensure interprofessional (IP) healthcare students. The research objectives are

- to explore how pre-licensure IP healthcare students describe client-centredness and how they perceive client-centredness fits within their professional identity, theories and values:
- to gain an understanding of how pre-licensure IP healthcare students learn about client-centredness;
- to understand how pre-licensure IP healthcare students learn with and from each other when developing client-centredness; and
- to examine factors that contribute to the development of client-centredness in prelicensure IP healthcare students by using digital stories as a catalyst for discussion and by asking students to reflect on practice experiences in their academic preparation.

Participant Selection

You are being asked to participate in this study because as a pre-licensure IP healthcare student at the University of Manitoba (U of M), you are developing client-centredness (the professional value, belief and attitude that guides your approach to patient-centred, person-centred, or family-centred practice). The researchers would like to better understand the process of developing client-centredness and how you learn with and from each other in an IP group while developing client-centredness. The researchers believe that academic preparation may be enhanced by advancing an understanding of development of client-centredness in IP student groups.

A total of eight participants will be asked to participate in this study. Each participant will be enrolled in a different discipline out of a potential ten healthcare disciplines at the University of Manitoba during the 2017-2018 academic year. Each participant will partake in a practice experience (such as fieldwork, placement, clinical rotation or practicum) as part of his/her regular academic preparation through the U of M between the first and third focus group in this study.

Study Procedures

- The method of data collection for this study will be focus groups. Focus groups are group discussions with people who know something about the topic of interest. Focus groups are ways of finding out people's thoughts and ideas about a specific topic.
- You will be in a group of at maximum eight participants.
- Participation in this study will be for three focus groups, each lasting approximately 90 to 120 minutes in duration. Focus group participants will remain consistent for each of the three focus groups. Focus groups are anticipated to occur in November 2017, January 2018 and March 2018. Focus groups will take place at the U of M Bannatyne Campus.

- There will be two co-facilitators who will ask questions and facilitate the discussion. The co-facilitators will be the principal investigator of this study (Denyse Blanco) and her study advisor/co-investigator (Dr. Jacquie Ripat).
- The group will be asked some questions relating to your experience with your development of client-centredness (the professional value, belief and attitude that guides your approach to patient-centred, person-centred, or family-centred practice). These questions will help us to better understand how pre-licensure IP healthcare students describe and learn about client-centredness. The questions will help us to understand how you believe client-centredness fits within your professional identity, values, and theories. The questions will help us to understand the factors you believe have contributed to your development of client-centredness and how do you, as an IP group of healthcare students, learn with and from each other while discussing client-centredness. During the focus groups, you will watch/listen to three different client digital stories (one per focus group). Watching/listening to these digital stories will help provide some content for discussion related to the questions noted above. At the end of the first focus group, you will be provided with some information about reflective journaling. Reflective journaling is an optional component of your participation in this study. Reflective journaling is a strategy you may choose to use to help yourself to deliberately attend to your experiences of client-centredness between focus group one and focus group three. Reflective journaling may help you to more explicitly notice client-centredness during the practice experiences (such as fieldwork, placement, clinical rotation or practicum) you partake in during your regular academic preparation through the University of Manitoba.
- The focus groups will be digitally audio recorded and transcribed. Focus group one will be transcribed by the principal investigator. Focus group two and three will be transcribed by a professional transcriber. Transcription will ensure accurate reporting of the information that you provide.
- Transcribers will sign a form stating that they will not discuss any item on the recordings with anyone other than the researchers.
- At the start of the session everyone will be asked to respect the privacy of the other group members. All participants will be asked not to disclose anything said within the context of the discussion, but it is important to understand that other people in the group with you may not keep all information private and confidential.
- You will be asked to select a pseudonym to use in place of your name during the focus groups. You will be asked to wear a name tag with the pseudonym you select during the focus groups. No one's real name will be asked or revealed during the focus groups. However, should another participant call you by your real name, the transcriber will be instructed to remove all real names from the transcription and replace them with your selected pseudonym.
- Upon completion of each focus group, the digital audio recordings will be transferred from the recording device to an MP3 file on a password protected computer. Each focus group MP3 file will be saved on a password protected USB flash drive which will be stored in a locked file cabinet and office before and after being transcribed. The audio recordings will be deleted from the recording devices immediately after transfer to MP3 files on the computer and USB. The MP3 files will be destroyed upon completion of data analysis which is anticipated to be within three to six months after the third focus group. The MP3 files will be transcribed as *Word* documents and saved on a password protected

- USB flash drive. The transcriptions will be maintained for three years after the completion of this study and then they will be destroyed.
- You will be asked if you would like to participate in a voluntary member check in follow-up to data collection and analysis. Member checking is a strategy used to increase rigor of a qualitative study. Member checking allows participants to review results and to confirm accuracy. Your involvement in member checking would consist of reviewing a summary of the results and conclusions drawn from the data, then providing feedback on how true you believe the summary to be an accurate representation of the discussion that occurred during the focus groups. Member checking is anticipated to occur within three to six months post completion of the third focus group. Member checking may occur by use of your University of Manitoba email account or by telephone. If you are agreeable to participating in member checking, you will be contacted by the principal investigator at the appropriate time.

Risks and Discomforts

There are no anticipated physical risks to participants. Focus group members will be asked to keep the information provided in the groups confidential; however, a potential risk that might exist for some would be that information about you might be discussed outside the group by other participants and be traced back to you.

There are very few risks to you. However, there are some potential risks to you by participating in this research. It is possible that talking about development of client-centredness (the professional value, belief and attitude that guides your approach to patient-centred, person-centred, or family-centred practice) might be emotional, embarrassing or stressful to you. Staff (the principal investigator and her study advisor) will be available if you feel like there is anything that has come up for you during the focus group that is upsetting, or we will help you to find counselling services.

Benefits

Being a focus group member may not help you directly, but information gained may help other students with their development of client-centredness in the future. We anticipate that your participation in the focus groups may contribute to your learning and development of client-centredness. We hope that the information learned from this study may be used by healthcare educational programmes to incorporate into curriculums and learning experiences of prelicensure IP healthcare students. We hope that through educational efforts to increase client-centred development of pre-licensure IP healthcare students, there will be an ultimate increase in client-centred healthcare provision for future clients including yourself.

Costs

There is no cost to you to attend the focus group discussions. You will be responsible for costs associated with personal transportation and/or parking/bus fare to/from the focus group discussions; a \$10 honorarium per participant per focus group will be provided to help off-set costs of transportation and/or parking/bus fare.

Payment/Compensation for Participation

You will be given a \$10 honorarium per completed study visit (for participation in each focus group) for a maximum of \$30 per participant upon termination of your participation in this research study. The honorarium will help to off-set possible costs for parking and/or bus fare. You will be provided with light refreshments at each focus group. At the first focus group, you will be provided with a small notebook which you may choose to use for reflective journaling. The notebook will by yours to keep and it will not be collected by, or reviewed by the researchers.

Confidentiality

We will do everything possible to keep your personal information confidential. Your name will not be used at all in the study records. A list of names and contact information of participants will be kept in a secure file so we can send you a summary of the results of the study if you volunteer to participate in member checking. If the results of this study are presented in a meeting, or published, nobody will be able to tell that you were in the study. Please note that although you will not be identified as the speaker, your words may be used to highlight a specific point. The collection and access to personal information will be in compliance with provincial and federal privacy legislations.

During the focus groups, we ask that all participants respect and maintain the confidentially of the discussion; however, it is not possible for the researchers to guarantee that everyone will do so.

Audio files of the focus group discussions will be typed and used to prepare a report. The audio files will be kept on a password protected USB flash drive in a secure locked file cabinet and office until data analysis is complete, which is anticipated to be three to six months after completion of the third focus group. The typed notes will be kept on a separate password protected USB flash drive in a secure locked file cabinet and office for three years after the completion of this study. Only the principal investigator (Denyse Blanco) and her study advisor (Dr. Jacquie Ripat) will know your name and contact information. Co-investigators (Dr. Pamela Wener and Dr. Christine Ateah) will only have access to anonymized data collected in this study. Only the research staff (Denyse Blanco, Dr. Jacquie Ripat, Dr. Pamela Wener and Dr. Christine Ateah) will have access to data collected in this study.

Some people or groups may need to check the study records to make sure all the information is correct. All of these people have a professional responsibility to protect your privacy. These people or groups are:

- The Health Research Ethics Board of the University of Manitoba which is responsible for the protection of people in research and has reviewed this study for ethical acceptability
- Quality assurance staff of the University of Manitoba

All records will be kept in a locked secure area and only those persons identified will have access to these records. If any of your research records need to be copied to any of the above,

your name and all identifying information will be removed. No information revealing any personal information such as your name, address or telephone number will leave the University of Manitoba.

Permission to Quote

We may wish to quote your words directly in reports and publications resulting from this study. With regards to being quoted, please check yes or no for the following statement:

Researchers may publish documents that contain quotations by me under the following		
conditions:		
Yes No	I agree to be quoted directly if a made-up name (pseudonym) is used.	

Voluntary Participation/Withdrawal from the Study

Your decision to take part in this study is voluntary. You may refuse to participate or you may withdraw from the study at any time. If you are a student, your participation or discontinuation in this study will not constitute an element of your academic performance nor will it be part of your academic record at the University of Manitoba. If you are an employee of the University of Manitoba, your participation or discontinuance in the study will not constitute an element of your job performance or evaluation nor will it be part of your personnel record at this institution.

Questions

If any que	stions co	ome up during or after the	he study, p	lease contact t	the principal inv	estigator,
Denyse B	lanco at		, or he	r co-investiga	tor/study adviso	or, Dr. Jacquie
Ripat at		or by	y phone at		•	

For questions about your rights as a research participant, you may contact The University of Manitoba, Bannatyne Campus Research Ethics Board Office at 204-789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Consent Signatures

- 1. I have read all 7 pages of this consent form.
- 2. I have had a chance to ask questions and have received satisfactory answers to all of my questions.
- 3. I understand that by signing this consent form I have not waived any of my legal rights as a participant in this study.
- 4. I understand that my records, which may include identifying information, may be reviewed by the research staff working with the Principal Investigator and the agencies and organizations listed in the Confidentiality section of this document.

- 5. I understand that I may withdraw from the study at any time and my data may be withdrawn prior to publication.
- 6. I understand I will be provided with a copy of the consent form for my records.
- 7. I agree to participate in the study.

Yes No	six months of participation in the third focus group in this study
If yes, please	contact me via: Email: Telephone:
Contact infor	mation:
Participant signatu	re: Date:
	name:
	v) to study team members:
_	ave fully explained the relevant details of this research study to the bove and believe that the participant has understood and has knowingly given
Printed name:	Date:
Signature:	(day/month/year)
Role in the study: _	

Appendix F Participant Contact Information Form

Participant Name	Participant Email Address	Participant Phone Number	Participant Pseudonym	Participant Study Number
				1
				2
				3
				4
				5
				6
				7
				8

Appendix G

Participant Description Questionnaire

Thank you for taking the time to participate in this study. The following information is being collected to provide a summative description of the participants in this study. Your identity will be kept confidential. Please answer the following questions.

What 1	pre-licensure healthcare education program are you presently enrolled in? (Check one)
	Bachelor of Nursing
	Bachelor of Respiratory Therapy
	Bachelor of Science (Pharmacy)
	Bachelor of Social Work
	Diploma in Dental Hygiene
	Doctor of Dental Medicine
	Master of Occupational Therapy
	Master of Physical Therapy
	Master of Physician Assistant Studies
	Medical Doctor (MD) Program
What (Checl	year of your pre-licensure healthcare education program are you presently enrolled in? k one)
	Year 1
	Year 2
	Year 3
	Year 4
Do yo	u have a prior degree/background training/education? (Check one)
	No
	Yes
If Yes	, please describe:
•	ou have a career before entering your current pre-licensure healthcare educational am? (Check one)
	No
	Vac

If Yes,	please describe:
Have y	you participated in other interprofessional learning opportunities? (Check one) No
	Yes
If Yes,	please describe:
	t of your current academic preparation, when will you have opportunity to participate in the experiences (such as fieldwork, placement, clinical rotation or practicum)? (Check all ply)
	October 2017
	November 2017
	December 2017
	January 2018
	February 2018
	March 2018
	None
What i	s your age? (Check one)
	18 to 25 years
	26 to 35 years
	36 to 45 years
	46 years or older
What i	s your gender? (Check one)
	Male
	Female
	Prefer not to disclose

Thank you for completing the above Participant Description Questionnaire. This information will help me to understand the study population and describe it in my final report.

Denyse Blanco

Appendix H

Semi-Structured Focus Group Guide

Introduction:

- Check people in as they arrive
- Welcome
- Provide verbal description of the study. Hand out informed consent forms; provide time to review.
- Ask participants to sign informed consent.
- Ask participants to select a pseudonym for use in the focus groups. Ask participants to
 put on a name tag with their selected pseudonym.
- Together with participants, fill out participant contact information form (Appendix F)
 including names, email addresses, phone numbers, selected participant pseudonyms, and
 participant study numbers.
- Provide brief verbal outline for session (discussion, break, watch/listen to a client digital story, further discussion).
- Offer refreshments.
- Turn on digital audio recorder.
- Ask participants to introduce themselves by pseudonym and provide brief background information.
 - o Program and year of study
 - o Reason for participation in the study
 - o A personal interest, hobby or pass-time

Facilitate discussion guided by the following research questions:

- How do you define client-centredness?
 - o Prompt: What does it make you think of?
 - o Prompt: If you had to explain it to a friend, what would you say?
 - o Prompt: If you had to explain it on an oral exam, what would you say?
- How have you learned about client-centredness to-date?
 - o Prompt: In a course or during a particular portion of academic preparation?
 - Prompt: During practice experiences such as fieldwork, placement, clinical rotation or practicum?
 - o Prompt: In other ways?
- How have experienced client-centredness to-date?
 - O Prompt: During practice experiences such as fieldwork, placement, clinical rotation or practicum?
 - o Prompt: In a course or during a particular portion of academic preparation?
 - o Prompt: In other ways?
- How do you believe client-centredness fits within theory, professional values and professional identity?
 - O Prompt: Name a few of the theories you are learning about to guide your practice.
 (Allow time for response). How do you see (or not see) client-centredness fitting within that theory of practice?
 - o Prompt: Please describe some of your professional values.

Prompt: Please describe yourself as a future healthcare professional. Do you see
 yourself as similar or dissimilar to others in the room?

Pause for bathroom and refreshment break for 5 minutes. Inform group that they will be presented with a client digital story after the break followed by further discussion. Pause digital audio recorder.

- Re-welcome participants back into the room
- Turn on digital audio recorder
- Ask participants to watch/listen to a client digital story

Facilitate reflection and discussion guided by the following questions:

- Please describe the client presented in the digital story.
- Please describe the values of the client in the digital story.
- How do you perceive that the values of the client align or misalign with their own personal/professional values?
- What are ways you believe you could ensure provision of client-centred care for the client in the digital story?
 - Prompt: What do you hear as you listen to one another that suggests to you a client-centred approach?
 - Prompt: If this client were yours to work with, how could you make the client an active partner in your care relationship?
 - Prompt: In what ways could you promote client participation in decision-making and healthcare planning and delivery for this client?
- After listening to each other, is there anything you might consider doing differently in your future to be a more client-centred healthcare provider?

Conclusion focus group one and two:

- Provide "Appendix I: Reflective Journaling Guide" to participants along with a blank journal for each participant to keep.
- Provide brief verbal explanation of purpose of reflective journaling:
 - o To encourage deliberate attention to experiences of client-centredness
- Provide brief verbal explanation of optional strategies for reflective journaling as outlined in the reflective journaling guide (Appendix I).
- Remind participants that reflective journals are not a mandatory component of study participation; they are optional.
- Remind participants that reflective journals will not be collected for data analysis.
- Recommend to participants that they bring their reflective journals to the next focus group.
- Recommend to participants that they review their reflective journals prior to the next focus group.
- Provide written confirmation of time/location of next focus group; confirm participants' ability to attend.
- Provide honorarium for participation in focus group to each participant.
- Turn of digital audio recorder and store data.

Conclusion focus group three:

- Thank participants for their participation in all three focus groups.
- Provide honorarium to participants for participation in final focus group.
- Confirm participant contact information (Appendix F) if participants have agreed to be contacted for member checking purposes as data analysis progresses.

• Turn of digital audio recorder and store data.

Appendix I

Reflective Journaling Guide

Thank you again for your participation in this study to advance an understanding of the development of client-centredness from the perspective of pre-licensure interprofessional (IP) healthcare students.

Reflective journaling is an optional component of your participation in this study. Reflection includes attentive, critical and exploratory thinking to increase your awareness of your thoughts, actions and emotions (Nguyen, Fernandez, Karsenti, & Charlin, 2014) as you participate in classroom-based and practice experience learning. Reflective journaling may draw deliberate attention to your experiences of client-centredness between focus group one and three. Reflective journaling may help you to more explicitly notice client-centredness during the practice experiences you partake in during your regular academic preparation through the University of Manitoba (during fieldwork, placement, clinical rotation or practicum), and it may draw your attention to academic learning in diverse ways.

You may wish to keep your reflective journal with you as you attend classes and practice experiences over the next few months. As you think about client-centredness, jot down a few notes throughout your day. Please consider setting aside a few minutes at the end of your day to write about client-centredness. You may consider asking yourself the following questions as you complete your reflective journaling:

- How have I learned about client-centredness today? What did I notice?
- What did I learn about the clients that I saw today? What was most important to them in life? What motivates them to be healthy? How can I be a part of helping them to reach their goals by contributing to their health?
- What were the attitudes of the care providers I observed today? What did I see that looked client-centred? What did I see that did not seem client-centred?
- In what ways did I try to be client-centred today? What helped me to be client-centred? What made it difficult to be client-centred today?

Before attending the next focus group, please spend a few minutes reviewing the content of your reflective journal. You may bring your reflective journal to the next focus group, but it is not a requirement of your attendance at the group. Once again, thank you for your participation in this research study.

Sincerely, Denyse Blanco

Appendix J

Member Checking Letter

September 22, 2018

Dear

Thank you for your participation in three interprofessional (IP) focus groups as part of a study to advance an understanding of the development of client-centredness from the perspective of pre-licensure IP healthcare students.

The focus group data has been analysed and I invite you to be involved in member checking of the data. Member checking is a strategy used to increase rigor of a qualitative study. Member checking allows study participants to review qualitative results and to confirm accuracy. Your involvement would consist of reviewing a summary of results and conclusions drawn from the data, then providing feedback on whether you believe the summary to be an accurate representation of the discussion that occurred during the focus groups. Your participation in the member checking process is completely voluntary. If you are interested, please review the summary below, then provide a brief response to the following question:

Do you think this summary of results and conclusions represents your perceptions of the development of client-centredness from the perspective of pre-licensure IP healthcare students?

Summary of Results and Conclusions

This study revealed an overarching theme that IP Healthcare Students Learn about Client-Centredness with and from Each Other. Three subthemes contributed to the overarching theme, each with their own set of categories (see Figure 1). It was evident that learning was a process influenced by multiple intersecting elements. The subtheme titled, Overlapping Learning Opportunities are Necessary for the Development of Client-Centredness, revealed categories that further described each learning opportunity including (a) didactic teaching, (b) practice experience, (c) personal commitment with deliberate attention and (d) open IP discussion including stories. As the overlapping learning opportunities described in the first subtheme occurred, participants also described moving through a process of evolving understanding of client-centredness. Two categories captured the second subtheme - Evolving Understanding of Client-Centredness, namely, (a) Vague understanding of black and white description to (b) clearer understanding of grey application. The final subtheme suggested that participants were Becoming Client-Centred Over Time. This subtheme was depicted in two categories that illustrated the change over time from (a) doing what one has been taught to do, to (b) believing oneself to be client-centred. The latter category intertwined with participants' perceptions of how they applied their understanding of client-centredness in practice as client-centred healthcare providers.

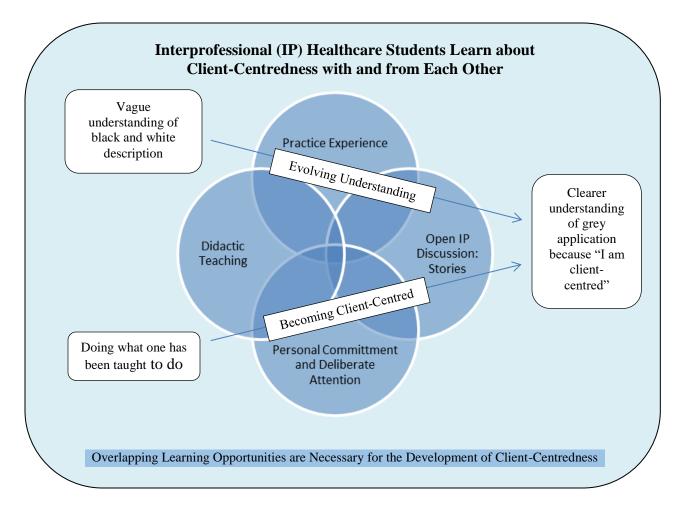


Figure 1. Interprofessional healthcare student development of client-centredness.

As stated above, if interested, please provide a response to the question, "Do you think this summary of results and conclusions reflects your perceptions of the development of client-centredness from the perspective of pre-licensure IP healthcare students?" If you wish to respond, please do so by email to by October 12, 2018. If I do not hear from you, I will assume that you are in agreement with the summary.

If there is anything else that you would like to add, please feel free to comment at this time. Thank you for considering involvement in this member checking process. If you have any questions about this study, please contact me by email or my study advisor (Dr. Jacquie Ripat) by email at or by phone at Thank you.

Denyse Blanco Faculty of Graduate Studies Master of Science (Rehabilitation Sciences) Student

Appendix K

Health Research Ethics Board (HREB) Certificate of Approval



P126-770 Bannatyne Avenue Winnipeg, Manitoba Canada, R3E 0W3 Telephone: 204-789-3255 Fax: 204-789-3414

Research Ethics - Bannatyne
Office of the Vice-President (Research and International)

HEALTH RESEARCH ETHICS BOARD (HREB) CERTIFICATE OF FINAL APPROVAL FOR NEW STUDIES Delegated Review

PRINCIPAL INVESTIGATOR: Denyse Blanco	INSTITUTION/DEPARTME U of M/Medical Rehabilitati Rehabilitation Sciences	7.3.0.0 T-0.0.0.T-0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.
APPROVAL DATE: September 27, 2017		RY DATE: mber 27, 2018
STUDENT PRINCIPAL INVESTIGA Dr. Jacqueline Ripat	TOR SUPERVISOR (If applicab	ole):

PROTOCOL NUMBER:	PROJECT OR PROTOCOL TITLE;
N/A	Development of Client-Centredness: Perceptions of Interprofessional Healthcare Students
SPONSORING AGENCIE	S AND/OR COORDINATING GROUPS:
N/A	

Submission Date of Investigator Documents:	HREB Receipt Date of Documents:	
September 5 and September 20, 2017	September 5 and September 22, 2017	_

THE FOLLOWING ARE APPROVED FOR USE:

Document Name	Version(if applicable)	Date
Protocol: Protocol including Clarifications as per Letter dated September 20, 2017 and Revised REB Submission Form submitted September 20, 2017	V. 1	August 26, 2017
Consent and Assent Form(s): Research Participant Information and Consent Form - Focus Group	V. 1	August 26, 2017
Other: Questionnaires/Scales/Instruments Aggendix	V. 1	August 26, 2017
Advertisements/Recruitment/Social Media Appendix	V. 1	August 26, 2017
Participant Contact Information Form	V. 1	August 26, 2017
Participant Screening Questionnaire	V. 1	August 26, 2017

CERTIFICATION

The above named research study/project has been reviewed in a **delegated manner** by the University of Manitoba (UM) Health Research Board (HREB) and was found to be acceptable on ethical grounds for research involving human participants. The study/project and documents listed above was granted final approval by the Chair or Acting Chair, UM HREB

HREB ATTESTATION

The University of Manitoba (UM) Research Board (HREB) is organized and operates according to Health Canada/ICH Good Clinical Practices, Tri-Council Policy Statement 2, and the applicable laws and regulations of Manitoba. In respect to clinical trials, the HREB complies with the membership requirements for Research Ethics Boards defined in Division 5 of the Food and Drug Regulations of Canada and carries out its functions in a manner consistent with Good Clinical Practices.

umanitoba.ca/research

QUALITY ASSURANCE

The University of Manitoba Research Quality Management Office may request to review research documentation from this research study/project to demonstrate compliance with this approved protocol and the University of Manitoba Policy on the Ethics of Research Involving Humans.

CONDITIONS OF APPROVAL:

- 1. The study is acceptable on scientific and ethical grounds for the ethics of human use only. For logistics of
- performing the study, approval must be sought from the relevant institution(s).

 This research study/project is to be conducted by the local principal investigator listed on this certificate of approval.

 The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to the research study/project, and for ensuring that the authorized research is carried out according to governing law.
- This approval is valid until the expiry date noted on this certificate of approval. A Bannatyne Campus Annual Study Status Report must be submitted to the HREB within 15-30 days of this expiry date.
- Any changes of the protocol (including recruitment procedures, etc.), informed consent form(s) or documents must be reported to the HREB for consideration in advance of implementation of such changes on the Bannatyne Campus Research Amendment Form.
- 6. Adverse events and unanticipated problems must be reported to the HREB as per Bannatyne Campus Research
- Boards Standard Operating procedures.

 The UM HREB must be notified regarding discontinuation or study/project closure on the Bannatyne Campus Final Study Status Report.

Sincerely,

John Arnett, PhD. C. Psych. Chair, Health Research Ethics Board Bannatyne Campus



Clinical Practices.

Research Ethics - Bannatyne P126-770 Bannatyne Avenue Winnipeg, MB Canada R3E 0W3 Phone +204-789-3255 Fax +204-789-3414

HEALTH RESEARCH ETHICS BOARD (HREB)

CERTIFICATE OF ANNUAL APPROVAL

PRINCIPAL INVESTIGATOR: Denyse Blanco HREB MEETING DATE (If applicable):		INSTITUTION/DEPARTMENT: U of M/Rehabilitation/Rehabilitation Sciences APPROVAL DATE: September 17, 2018		ETHICS #: HS21180 (H2017:334) EXPIRY DATE: September 27, 2019		
PROTOCOL NUMBER:		T OR PROTOCOL	TITLE: edness: Perceptions	of Interp	professional H	lealthcare Students
SPONSORING AGENCIES NA	AND/OR CO	ORDINATING GRO	OUPS:			
Submission Date of Invest August 24, 2018	tigator Docur	nents;	HREB Receipt Da August 23, 2018	te of Do	cuments:	N/
THE FOLLOWING AMEND Document Name(if applicable)	MENT(S) and	DOCUMENTS AR	RE APPROVED FOR	USE:		
Annual approval Annual approval implies I Brochures, advertisemen are approved.	ts, letters of initia	ent <u>HREB approved</u> ver l'contact or questionnair	rsions of the protocol, Invi res, and recruitment meth	estigator ods, etc.	Version(if applicable)	Date
Annual approval Annual approval implies I Brochures, advertisemen	(s): UM) Health R: d on this Cert hical grounds REB, per the r	esearch Board (HR ificate of Annual / for research involv esponse to the cor	REB) has reviewed th Approval as per the ring human participar	e annua category	applicable) I study status y of review lis	report for the ted above and was was granted by the

Research Ethics and Compliance is a unit of the Office of the Vice-President (Research and International)

umanitoba.ca/research

QUALITY ASSURANCE

The University of Manitoba Research Quality Management Office may request to review research documentation from this research study/project to demonstrate compliance with this approved protocol and the University of Manitoba Policy on the Ethics of Research Involving Humans.

CONDITIONS OF APPROVAL:

- The study is acceptable on scientific and ethical grounds for the ethics of human use only. For logistics of performing the study, approval must be sought from the relevant institution(s).
- 2. This research study/project is to be conducted by the local principal investigator listed on this certificate of approval.
- The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to the research study/project, and for ensuring that the authorized research is carried out according to governing law.
- This approval is valid until the expiry date noted on this certificate of annual approval. A Bannatyne Campus
 Annual Study Status Report must be submitted to the REB within 15-30 days of this expiry date.
- Any changes of the protocol (including recruitment procedures, etc.), informed consent form(s) or documents must be reported to the HREB for consideration in advance of implementation of such changes on the Bannatyne Campus Research Amendment Form.
- Adverse events and unanticipated problems must be reported to the REB as per Bannatyne Campus Research Boards Standard Operating procedures.
- The UM HREB must be notified regarding discontinuation or study/project closure on the Bannatyne Campus Final Study Status Report.

Sincerely,

John Arnett, PhD., C. Pysch. Chair, Health Research Ethics Board Bannatyne Campus