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Perceptions of Collaboration and Mutual Respect Among Members of Interprofessional Teams

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This is to certify that the doctoral dissertation by

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Walden University
2018

Abstract

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by

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MN, University of Windsor, 2009

BScN, University of Windsor, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Government agencies are encouraging healthcare practitioners to work in interprofessional teams to address the complex needs of an aging population, to improve client outcomes, and to increase the cost-effectiveness of health care. However, a clearer understanding of the elements required for an effective interprofessional collaborative practice is needed. The purpose of this online, descriptive study was to focus on one component, mutual respect, and determine its relationship to collaboration among members of interprofessional teams working in family health teams (FHTs) and community health centers (CHCs) across Ontario. D'Amour's four-dimensional model of collaboration was used as the theoretical basis. This model suggests that collective action can be analyzed based on shared goals and vision, internalization, formalization, and governance. FHTs and CHCs were contacted by telephone and email to recruit participants and 99 healthcare professionals returned usable surveys. Using Spearman's rho and multiple regression, a significant positive relationship was found between mutual respect and collaboration. After controlling for the respondents' demographic characteristics, the correlation between these variables remained significant. Correlation scores between mutual respect and collaboration were higher in FHTs compared to CHCs. Significant differences in scores were also demonstrated between nurses and nonurses, and levels of education. This research provided data on how collaboration is progressing, how respected professionals felt, and assisted in the identification of areas that may be influential in making improvements. The knowledge obtained can affect positive social change by influencing practice, education, and guiding future research.

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Dedication

This dissertation is dedicated to those who supported me throughout this process. Specifically, I want to dedicate this to my Lord and Savior. He is the One who blessed me with the skill, knowledge, and perseverance to complete this journey. Next, I want to dedicate this dissertation to my loving family. My dad, who is no longer with me physically, has always been my biggest fan and was very proud of all my education and career accomplishments. Thank you, Dad, for believing that I could succeed at anything I put my mind to. My husband, John, for his constant love, encouragement, and support. Although you may not have had a clue to exactly what I was undertaking, your quiet presence was what I needed most. Plus, I would have gone hungry without you! To my children, for understanding that I couldn't always be there to help with child care, household chores, or school work. I especially want to dedicate this dissertation to my daughter, Kadee, for her help with proof reading and finding just the right words or phrases to use when I was struggling. Finally, I want to dedicate this dissertation to all my friends who stuck by me when I had to miss celebrations and made the effort to get together despite having to work around my crazy schedule. I could not have completed this dissertation without the support of each one of you.

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Chapter 1: Introduction to the Study

Introduction

Respect and collaboration between healthcare professionals is vital to quality patient care; therefore, whether these two factors are prevalent within Canada's interdisciplinary healthcare system warrants review (Bookey-Bassett, Markle-Reid, Mckey, & Akhtar-Danesh, 2016; Kar, 2014). Many researchers have examined collaboration in a variety of healthcare settings and disciplines (Clancy, Gressnes, & Svensson, 2012; Donald et al., 2009; Gotlib Conn, Kenaszchuk, Dainty, Zwarenstein, & Reeves, 2014; McInnes, Peters, Bonney, & Halcom, 2015). However, there are limited studies that look at professionals working within family health teams (FHTs) or community health centers (CHCs) in Ontario (Gocan, Laplante, & Woodend, 2014). Understanding the essential elements of collaboration, such as coordination, cooperation, and partnerships, and determining if these features are present in FHTs and CHCs needs further examination. This research will fill a gap in understanding by focusing specifically on the relationship between interprofessional collaboration and mutual respect. The information gleaned from this study can provide a better understanding of the factors that facilitate or inhibit collaboration and can aid in the development of interventions to improve interprofessional practice.

The purpose of this chapter is to introduce the study, which explored the perceived relationship between collaboration and mutual respect among members of interprofessional teams working in FHTs and CHCs throughout Ontario. Interprofessional collaboration is an important initiative aimed to increase the

effectiveness of healthcare services and improve patient outcomes (D'Amour, Ferrada-Videla, Rodriguez, & Beaulieu, 2005; Morgan, Pullon, & McKinlay, 2015; Sangster-Gormley et al., 2015). Learning to work within interprofessional teams requires each profession to abandon profession specific ownership over the client's care and to acknowledge and respect the roles and expertise each profession can offer (Orchard, 2010). This shift in ownership could significantly improve healthcare delivery.

This chapter includes the statement of the problem, the purpose of the study, the research questions, and hypotheses. This chapter also provides a brief overview of the conceptual framework, the definition of terms, assumptions, scope, limitations, and the significance of the study. Subsequent chapters further explore many of the areas addressed in this section.

Background

Client care is becoming increasingly multifaceted. An increased focus on the social determinants of health (holistic care) may play a key role in promoting this multifaceted perspective (van Dongen et al., 2016). Additionally, population aging has resulted in increased chronic disease diagnoses and health comorbidities making multifaceted care more necessary than ever before (Bookey-Bassett et al., 2016; van Dongen et al., 2016). Government agencies are encouraging healthcare practitioners to work in interprofessional teams to address these complex healthcare needs (Ministry of Health and Long-Term Care, MOHLTC, 2009). Interprofessional collaboration is recognized as a technique to improve client outcomes and the cost-effectiveness of health care in a variety of settings such as primary health care, acute care, and rehabilitation

(Bainbridge, Nasmith, Orchard, & Wood, 2010). However, being part of an interprofessional team and engaging in collaboration can be two different experiences (O'Reilly et al., 2017; Thannhauser, Russell-Mayhew, & Scott, 2010).

Studying the relationship between collaboration and respect is complex for many reasons. Clancy et al. (2012), D'Amour et al. (2005), and McInnes et al. (2015) reiterated that collaboration is a complex phenomenon because it can be interpreted differently by various professionals. It is also difficult to determine and measure the elements necessary for collaborative practice. Swihart (2016) suggested one possibility for measurement by providing an overview of the core competencies required to maintain a successful collaborative practice. Some of these competencies included working with other professionals and maintaining a climate of mutual respect and shared values (Swihart, 2016). Other competencies included being aware of one's role and accessing the roles of others to benefit client care, communicating with all members of the team responsively and responsibly, and utilizing excellent team building skills (Swihart, 2016). It was essential to utilize these competencies when analyzing the data obtained from my study to verify the results and to demonstrate whether the FHTs and CHCs included in the study are indeed using a collaborative model of practice. Also, various conceptual models (or frameworks) and measurement tools have been utilized in the study of interprofessional practice thus decreasing the ability to generalize or assimilate results (D'Amour, Goulet, Labadie, Martin-Rodriguez, & Pineault, 2008; Gaboury, Bujold, Boon, & Moher, 2009; Hepp et al., 2015; Légaré et al., 2010; Mulvale, Embrett, & Razavi, 2016).

Researchers have also focused on the role formal education plays in promoting interprofessional collaboration. For instance, Morris and Matthews (2014) conducted a study which demonstrated there was a lack of formal education on functioning in interdisciplinary (interprofessional) teams and working collaboratively. The authors suggested that providing interprofessional education opportunities to new practitioners may increase collaboration and respect (Morris & Matthew, 2014). Continuing educational opportunities for seasoned practitioners is also important. Moradi, Najarkolai, and Keshmiri (2016) discussed the importance of continuing education opportunities for practitioners to improve interprofessional collaboration, address public health needs, and to improve healthcare outcomes. However, this ongoing education needs to address issues such as core competencies, collaborative culture, and concerns with the present educational system (Moradi et al., 2016). In my study, I identified (through demographic data) those members who received formal education in either a collaborative (multiple disciplines together) manner or a traditional (by discipline) manner. Correlations between the type of education received and perceptions of mutual respect and collaboration were analyzed to determine if the type of education was a significant factor.

Another component of collaboration that requires further study was mutual respect. Mulvale et al. (2016) conducted a systematic review and determined that limited studies focused on the association between collaboration and macro or mezzo factors. Results of Mulvale et al.'s (2016) analysis suggested looking at factors that may cross all levels. Mutual respect is a concept that potentially crosses all levels. Therefore, my study

included input from various members of healthcare teams who work in FHTs and CHCs throughout Ontario.

In a study by DeCicco, Laschinger, and Kerr (2006), registered nurses (RNs) working in long-term care facilities differed significantly on the level of respect when compared to registered practical nurses (RPNs). The authors stipulated that a potential reason for this difference was the leadership roles RNs hold within long-term care organizations and how these leadership roles tend to place RNs higher on a hierarchical structure (DeCicco et al., 2006). Therefore, determining the roles played by the various professionals within the organization was another significant variable to consider.

This study evaluated the correlation between perceived respect and collaboration among the various healthcare professionals working in FHTs and CHCs throughout Ontario. The data obtained provided insight into differences in perceptions based on discipline. Faulkner and Laschinger (2008) utilized a similar methodology as my study and discovered that nurses working in acute care settings felt more respected when their efforts were recognized and rewarded. The authors suggested that employees who feel respected are more likely to trust and remain committed to the organization (Faulkner & Laschinger, 2008). Therefore, healthcare professionals need to reciprocate mutual respect among all members of interprofessional teams. The satisfied professional staff has the potential to change the delivery of healthcare and improve the experiences of both clients and practitioners.

Problem Statement

FHTs and CHCs are a recent development in the delivery of primary healthcare in Canada (Gocan et al., 2014). FHTs and CHCs aim to increase collaborative practices and improve client outcomes by employing various healthcare professionals in one setting (MOHLTC, 2009). However, researchers have verified that enforcing the utilization of interprofessional teams does not assure collaboration among members (Gocan et al., 2014; Heale, Dickieson, Carter, & Wenghofer, 2014; O'Reilly et al., 2017). In fact, many healthcare agencies continue to follow the rules of hierarchical systems where physicians are ranked higher in importance than other members of the team (Howard, Brazil, Akhtar-Danesh, & Agarwal, 2011, O'Reilly et al., 2017). These hierarchical systems can be disrespectful which causes a decline in team collaboration. Lack of collaboration leads to individual team members being tentative in expressing their views, assisting in a client's plan of care, or being actively involved in the organization (Almost & Laschinger, 2002, Atwal & Caldwell, 2005; Gotlib Conn et al., 2014; Laschinger & Finegan, 2005; McInnes et al., 2015). Improvements in healthcare delivery can occur when there is a better understanding of the factors that affect collaboration. Therefore, the experiences of healthcare professionals working within interdisciplinary teams required further examination.

D'Amour et al. (2005) conducted a literature review and reiterated the fact that collaboration is a multifaceted process. Part of the complexity lies in the fact that there can be various degrees of collaboration. Additionally, collaboration can be in a state of constant flux. The authors also specified that more research was required to obtain a

better understanding of the dynamics of collaborating teams and the processes involved in collaboration (D'Amour et al., 2005). Mulvale et al. (2016) conducted a systematic review and discovered that there is a limited amount of statistically significant data available which identifies the issues linked to collaboration in interprofessional primary care teams (IPCTs). In a similar review, O'Reilly et al. (2017) demonstrated the need for more input from a variety of healthcare professionals (beyond nurses and physicians) working in primary health care settings. Therefore, more research was necessary to understand the issues and forces that affect collaborative relationships in primary health care team settings (Almost & Laschinger, 2002; Mulvale et al., 2016; O'Brien, Martin, Heyworth, & Meyer, 2009).

Purpose of Study

The purpose of my study was to explore the relationship between perceptions of collaboration and mutual respect among members of interprofessional teams from FHTs and CHCs throughout Ontario. To analyze this issue, I utilized a correlational, descriptive, quantitative research design. An assessment of the perceived relationship between collaboration and mutual respect can aid in the development of interventions to improve interprofessional practice. This research was just one step taken to increase understanding.

Research Questions and Hypotheses

Research Question 1: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario?

$H_0$1: There is no relationship between mutual respect as measured by the modified esteem subscale of the Effort-Reward Imbalance Questionnaire (ERIQ; Siegrist, 1996) and collaboration as measured by the Assessment of Interprofessional Team Collaboration Scale II (AITCS-II; Orchard, King, Khalili, & Bezzina, 2012; Orchard, Pederson, Read, & Laschinger, 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario.

H_a1: There is a relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario.

Research Question 2: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics?

$H_0$2: There is no relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

H_a2: There is a relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team

members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

Theoretical Framework for the Study

For this study, I utilized the structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008). D'Amour's and Oandasan four-dimensional model of collaboration suggests that collective action can be analyzed based on shared goals and vision, internalization, formalization, and governance (D'Amour et al., 2008). These four dimensions and the interaction between them demonstrate the processes inherent in collaboration (D'Amour et al., 2008).

The central dimension of focus for my study was internalization. Internalization, as suggested by D'Amour et al. (2008), involves professionals being aware of and managing their interdependencies. Awareness then translates into a sense of belonging, increased knowledge of each other's values and discipline, and mutual trust (D'Amour et al., 2008). I provided a more detailed explanation of this framework in Chapter 2.

My study examined the variable respect in relation to collaboration. D'Amour and Oandasan's model was appropriate to utilize as researchers have demonstrated linkages between the concepts of trust and respect (Laschinger & Finegan, 2005). Laschinger and Finegan (2005) stated that employees who are empowered and are treated fairly and with respect, are more likely to trust management and their colleagues. Faulkner and Laschinger (2008) discovered that nurses working in acute care settings felt more respected when their efforts were recognized and rewarded. The authors suggested that employees who feel respected are more likely to trust and remain committed to the

organization (Faulkner & Laschinger, 2008). MacDonald et al. (2010) conducted a qualitative study which demonstrated that interprofessional practice improves when there is respect for the roles, expertise, and unique contribution of other team members. Baxter and Markle-Reid (2009) also supported the idea that collaborative, respectful interactions based on trust improve practitioner competence and interprofessional practice.

Nature of the Study

The purpose of this study was to ascertain if there was a relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario. Therefore, the best method to utilize was a correlational, descriptive, quantitative research design (Creswell, 2009; Grove, Burns, & Gray, 2013). A survey approach (questionnaire) was used to obtain quantitative data. I administered two validated, reliable questionnaires, and options for answers were provided using checklists and rating scales. The survey included demographic data like gender, age, years of service at present agency, overall years of experience, professional status, and type of education (collaborative or traditional) received.

The variable, mutual respect, was defined as valuing the contributions of other professionals who are involved in the same work processes and to consider how one's actions influence the ability of others to complete their job requirements (Gittell, 2006). Respect was measured utilizing questions from the modified esteem scale of the ERIQ developed by Siegrist (1996). The variable, collaboration, was defined as an equally shared partnership among members for the provision of improved quality of healthcare delivery (Engel & Prentice, 2013; Sullivan, 1998). Collaboration was measured utilizing

the AITCS-II (Orchard et al., 2012; Orchard et al., 2018). I provided descriptive analysis by reporting the mean, standard deviation, and range of scores for measures such as age, gender, years of service at present agency, overall years of experience, and professional and employment (full or part-time) status. Some of the variables only provided nominal data (gender, profession). Likert scales offered ordinal data, and ratio data included age, years of employment or years of service at present agency.

The type of data obtained affected the analyses conducted. Pearson's r and Spearman rho analyses are appropriate for correlational designed studies (Green & Salkind, 2014). The main purpose of my study was to determine if there was a relationship between mutual respect and collaboration among interprofessional teams working in CHCs and FHTs in Ontario. Another interest was to examine if there was a relationship (or relationships) between or among the interprofessional groups (physicians, social workers, nurses, etc.) and between practice settings (FHTs or CHCs). Multiple regression analyzes was used to examine the relationship between the dependent variable, level of collaboration, and the primary independent variable, mutual respect, and other predictor variables used as control variables such as gender, age, years of service, profession, and level of education. Correlation and multiple regression analyses were conducted using an appropriate statistical computer program (Statistical Package for the Social Sciences, SPSS 24), and I displayed the results in chart form for ease of interpretation. The level of statistical significance chosen was .05 (McClave & Sincich, 2006). I provided a more detailed discussion of the nature of this study in Chapter 3.

Definitions

This study used the following definitions.

Collaboration: A "dynamic, transforming process of creating a power-sharing partnership for pervasive application in health care practice" (Sullivan, 1998, p. 65). This process involves all members working collegially as a team in an environment of trust, respect, and open communication (Sangster-Gormley et al., 2015) which enables the shared knowledge and skills of the providers to synergistically influence the client care provided (Conway, Hu, & Daugherty, 1998).

Some of the critical attributes of a collaborative practice include:

- coordination (the ability to work together to achieve mutual goals),
- cooperation (the ability to listen to and value the viewpoints of all team members and to contribute your views),
- shared decision making (a process whereby all parties work together in exploring options and planning patients' care in consultation with each other, patients and relevant family members), partnerships (creation of open and respectful relationships in which all members work equitably together to achieve shared outcomes; Henneman, 1995)

Community Health Centers (CHCs): These have existed for over 40 years and are characterized by community governance (Glazier, Zagorski, & Rayner, 2012). CHCs provide primary care and focus on particular population needs (such as mental health and addictions) and aim to address social determinants of health (Glazier et al., 2012). The professionals provide an expanded scope of health promotion, outreach, and community

development services. The staff consists of salaried interprofessional team members (Glazier et al., 2012).

Family Health Teams (FHTs): Developed in 2006 and are primary healthcare establishments that include a team of physicians, nurse practitioners, registered nurses, social workers, dietitians, and other professionals who work together to provide primary healthcare to residents of the community (MOHLTC, 2016). FHTs are usually physician-led, and physicians receive payment through blended capitation models or salary models (Glazier et al., 2012).

Interprofessional: Multiple workers from varied backgrounds with distinctive professional values working together to provide services or to solve problems (Morgan et al., 2015). For this study, the focus was on healthcare professionals.

Interprofessional Collaborative Practice (IPCP): IPCP is "a partnership between a team of healthcare professionals and a client in a participatory, collaborative, and coordinated approach to shared decision-making around health and social issues" (Orchard et al., 2012, p. 58)

Interprofessional team members: Any interaction between one or more healthcare professionals on a regular basis for providing patient care (Orchard et al., 2018). Team members may include: physicians, pharmacists, nurses (registered and practical), nurse practitioners, dieticians, occupational therapist, physical therapists, social workers, as well as others.

Mutual respect: Valuing "the contributions of others involved in the work process and consider[ing] the impact of [one's] own actions on the ability of others to do their

work" (Gittell, 2006, p. 87). People feel disrespected when "they are ignored, disregarded, or dismissed lightly or thoughtlessly" (Laschinger & Finegan, 2005, p. 7). Respect is fundamental to employees' trust of others (Mishra & Spreitzer, 1998)

Assumptions

I considered the following assumptions to have a potential influence on the conclusions drawn from this investigation. First, I assumed that all members of family and community health interprofessional teams would participate and answer the survey questions honestly and accurately. Second, members of interprofessional teams desire to feel respected within their positions and want their work environments to meet all the components of collaborative interprofessional practice.

Scope and Delimitations

The purpose of this study was to explore the perceived relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario. I did not focus on the relationship between respect and collaboration in other practice settings such as hospitals or long-term care homes nor did I explore the perceptions of clients within any healthcare settings. Demographic data included gender, age, years of service at present agency, overall years of experience, professional status, and type of education (collaborative or traditional) received. There may be many other variables that affect interprofessional collaboration or respect that I did not address in this study. I completed Pearson's r and Spearman rho correlational analyses, and multiple regression analyses on the data obtained.

This study included healthcare professionals from any discipline working within FHTs and CHCs in Ontario. I selected professionals through convenience or purposive sampling from an approximate total of 184 FHTs and 87 CHCs in Ontario. The list of FHTs and CHCs in Ontario was randomly ordered by region and approached by telephone or email. After three failed attempts to reach the FHT or CHC manager or executive director to discuss the study, I contacted the next FHT or CHC. Consequently, the study results should be applied only to healthcare professionals and agencies that have similar attributes to the participants of this study.

In my study, I utilized the structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008). A component of interest from this model is internalization which involves professionals being aware of and managing their interdependencies. A review of the literature presented other theories that I also considered. Kanter's theory of workplace empowerment is a theory that I discovered was frequently referenced in the literature. According to Kanter, workplace behaviors and attitudes are determined by the social structures in the workplace (Kanter as cited in Sarmiento, Laschinger, & Iwasiw, 2004). Sarmiento et al. (2004) reported Kanter's definition of power as "the capacity to mobilize resources to accomplish work" (p. 135) and "the structure of power is derived from three sources: access to support, information, and resources" (p. 136). Kanter asserts that workers feel empowered when they perceive that their work environment provides enough opportunities for growth and provides access to the sources listed above (Kanter, as cited in Sarmiento et al., 2004). Access to resources is also influenced by the amount of informal and formal power an

individual within the organization possesses (Sarmiento et al., 2004). Laschinger and colleagues have conducted many studies utilizing Kanter's theory and various nurses' roles and outcomes (Faulkner & Laschinger, 2008; Laschinger & Finegan, 2005; Laschinger, Finegan, & Shamian, 2001; Laschinger, Wong, Cummings, & Gray, 2014; Sarmiento et al., 2004). However, Kanter's model, as well as others reviewed, were not chosen as they focused on team structure and access to resources and not necessarily the collaborative process.

Limitations

The results of my study are limited to FHTs and CHCs in Ontario or practices of similar demographics and are not be generalizable to other settings or populations (such as acute care settings, hospitals, or long-term care homes) or other jurisdictions (outside of Ontario). Also, I collected data for my study by utilizing an Internet survey. Therefore, I limited my research because of the self-reporting nature of this data. Participants who responded to the survey might be more open to collaboration, feel more respected, and work in exemplary interprofessional teams which may not be an accurate representation of the general population.

Thannhauser et al., (2010) conducted a review of instruments utilized to measure interprofessional collaboration and discovered few studies described instruments designed for use with professionals already practicing in the healthcare and social fields. Therefore, although studies have demonstrated the accuracy of the tools utilized in my study, more studies are required which use these tools in practice versus educational settings (Bronstein, 2002; DeCicco et al., 2006; Seigrist, 2002; Thannhauser et al., 2010).

Another limitation of the instruments available was the lack of consensus on the definition of interprofessional collaboration. This lack of consensus remained a concern for my study.

The AITCS-II was developed to determine how well professionals are collaborating in their teamwork (Orchard et al., 2012; Orchard et al., 2018). I chose this tool because it measures interactional factors of interprofessional collaboration and there was documented reliability and validity data for this instrument (Orchard et al., 2012; Orchard et al., 2018). The modified esteem subscale of the ERIQ (Siegrist, 1996) provided three questions that can be used to measure respect. The reliability of this measure ranged from .70-.91 (Seigrist, 2002; DeCicco et al., 2006). However, Seigrist's (2002) instrument has had limited exposure to use as an Internet survey method, and exposure to use with all professional groups involved at FHTs and CHCs may not have occurred which can result in reliability concerns.

Online surveys can be affected by the type of internet connection and the configuration of the user's computer (Evans & Mathur, 2005). For instance, questions and Likert scale responses may seem neatly aligned on one monitor but may be distorted and confusing on another monitor thereby affecting the ease of use (Evans & Mathur, 2005). The speed at which one can complete a survey could also be affected by the agencies internet connection. Internet speed and ease of use may have ultimately affected response rates.

The questionnaires were reviewed by the institutional review board (IRB) to ensure that I had identified all potential risks to participants and handled them

appropriately. Ethical considerations were minimal as I did not administer an intervention, the participants were professionals who could voluntarily choose to complete the survey, and coding was used to limit identifiable data (Creswell, 2009). I determined the number of questionnaires to distribute by utilizing a sample size formula (Bartlett, Kotrlik, & Higgins, 2001). I minimized the threat to validity caused by non response rates by using a broad cross-section. By sending a survey to all eligible addresses, I attempted to collect data from an unbiased sample. However, the potential for bias still existed due to the use of a purposeful sample of only FHTs and CHCs in Ontario (Creswell, 2009). The format for dissemination of the survey followed the guidelines by Salant and Dillman (1994) as referenced in Creswell (2009, p. 150) and as studied by Fekete, Segerer, Gemperli, and Brinkhof (2015).

Significance

This research filled a gap in understanding by focusing specifically on the relationship between interprofessional collaboration and mutual respect. This project was inimitable because it utilized a unique population of interprofessional teams (FHTs and CHCs in Ontario). Gocan et al. (2014) determined that while collaborative team functioning is present in FHTs, it has not yet reached its full potential. Therefore, evaluative research was needed to advance interprofessional team functioning. Determining if there was a relationship between collaboration and mutual respect amongst all healthcare members of FHTs and CHCs could provide insight into possible interventions and equip administrators with the data needed to promote positive social change within these work environments (MacDonald et al., 2010).

This quantitative research study has the potential to affect social change among both individuals (professionals) and organizations. My research provided information that can lead to solutions for better practice. By understanding the working relationships among the various healthcare providers employed at FHTs or CHCs in Ontario, advances can be made to enhance collaboration and respect. These advances in collaboration and respect can lead to improved access to care and increase the effectiveness and quality of the care provided (Gocan et al., 2014). Increased interprofessional collaboration and respect can also create a more positive workplace culture.

Bringing the health care professionals together so each can do what they are qualified to do but in a more unified manner improves patient care (Newhouse & Spring, 2010). Unified care management ranks high on collaboration. The collaboration of services leads to more positive workplaces which in turn benefits clients, families and the community (Tubbesing & Frederick, 2015). Collaboration of services could represent practice, advocacy, and human ethics. Therefore, researchers are required to think systemically due to the complex nature of interprofessional collaboration.

Summary

This chapter aimed to provide an overview of my study. Researchers have demonstrated the importance of obtaining a clearer understanding of the elements required for an effective interprofessional collaborative practice (Swihart, 2016). The purpose of my study was to focus on one component, mutual respect, and determine its relationship to collaboration among the various healthcare professionals working in FHTs and CHCs across Ontario. The information obtained from my study can provide insight

into possible interventions and equip leaders with the data needed to promote positive social change within FHT and CHC environments.

Chapter 2 includes an in-depth review of the existing literature and demonstrates why researchers are suggesting the importance of interprofessional collaboration as a measure to improve healthcare. I examined aspects of collaboration and mutual respect in different professions, reviewed the frameworks and theories that have guided previous research, and provided more in-depth information regarding the framework utilized in my study. Finally, I demonstrated how my study addressed a gap in the literature and aids in the development of interventions to improve collaboration in interprofessional team settings.

Chapter 2: Literature Review

Introduction

FHTs and CHCs are a relatively new development in the delivery of primary healthcare in Canada (Gocan et al., 2014). These healthcare agencies aim to increase collaborative practices and improve client outcomes by employing various healthcare professionals in one setting (MOHLTC, 2009). Researchers have verified that enforcing the utilization of interprofessional teams does not assure collaboration among members (Gocan et al., 2014; Heale et al., 2014). In fact, many healthcare agencies continue to follow the rules of hierarchical systems where physicians are ranked higher in importance than other members of the team (Howard et al., 2011). These hierarchical systems can be disrespectful which causes a decline in team collaboration. Lack of collaboration can cause individual team members to be tentative in expressing their views, assisting in a client's plan of care, or being actively involved in the organization (Almost & Laschinger, 2002, Atwal & Caldwell, 2005; Gotlib Conn et al., 2014; Laschinger & Finegan, 2005; McInnes et al., 2015).

A better understanding of the factors that affect collaboration is necessary to facilitate improvements. The purpose of my study was to explore the relationship between perceptions of collaboration and mutual respect among members of interprofessional teams from FHTs and CHCs throughout Ontario. An assessment of the perceived relationship between collaboration and mutual respect can aid in the development of interventions to improve interprofessional practice. A review of the current literature identified several common themes regarding interprofessional

collaboration and respect. One theme identified was the need to have a clear understanding of each professionals' roles and responsibilities (Lapkin, Levett-Jones, & Gilligan, 2011; Sexton & Baessler, 2016). Respect for the unique contributions each professional can add to the shared management of the client was identified as another essential component for improved healthcare and reduced cost (MacDonald et al., 2010; Sangster-Gormley et al., 2015). What was missing in the literature was a clear understanding of how respect and collaboration occur in various healthcare settings and the degree to which professionals perceive respect and collaboration. Part of the reason for this lack of knowledge was the variety of definitions (or understanding) of collaboration and the lack of consistent use of models and instruments (Perreault & Careau, 2012).

In this chapter, I have provided an overview of the search strategy undertaken in the review of the existing literature. Also, I highlighted the structuration model of collaboration which was the theoretical framework that was utilized, and I demonstrated how this model relates to the variables of interest for my study. Further, I provided an exhaustive review of the literature for the key variables of collaboration, mutual respect, and interprofessional team members. This chapter concludes with an overview of the various gaps in the literature related to these variables.

Literature Search Strategy

A literature review was conducted digitally through Internet databases with an emphasis placed on sources published within the previous five years. I completed this literature review after performing a thorough search of the following library databases:

CINAHL and MEDLINE Simultaneous Search, CINAHL Plus with Full Text, MEDLINE with Full text, and ProQuest Nursing and Allied Health Source. Google Scholar was also utilized to search for other cited resources and to expand the search for the conceptual model. My research encompassed various professions; therefore, I explored the same search terms through SocINDEX with Full Text, PsycINFO, and Cochrane Databases of Systematic Reviews. Different interprofessional teams were also searched using the terms *physicians, nurse practitioners, social workers, pharmacists, registered nurses, and physical therapists*. The database searches were limited to peer-reviewed articles written between 2013-2017 using the following search terms and combinations: interprofessional AND collaboration AND perceptions, attitudes, beliefs, or behaviors. Many of the results obtained related to interprofessional education as a form of collaboration among professionals. As this was not the purpose of my study, the search was refined further by adding the terms FHTs, CHCs, and primary health care. The remainder of this chapter covers the review of the literature as it relates to the conceptual framework and key variables.

Theoretical Foundation

For this study, I utilized the structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008). This four-dimensional model of collaboration suggests that collective action can be analyzed based on shared goals and vision, internalization, formalization, and governance (see Figure 1; D'Amour et al., 2008). These four dimensions and the interaction between them demonstrate the processes inherent in collaboration (D'Amour et al., 2008). The model shows the four

dimensions of collaboration and the ten indicators associated with these dimensions. The arrows indicate the interrelationships between the four dimensions and how they influence each other (D'Amour et al., 2008). The visual depiction of the structuration model of collaboration demonstrates the intricacies of interprofessional collaboration which lend to the challenges encountered in the research process.

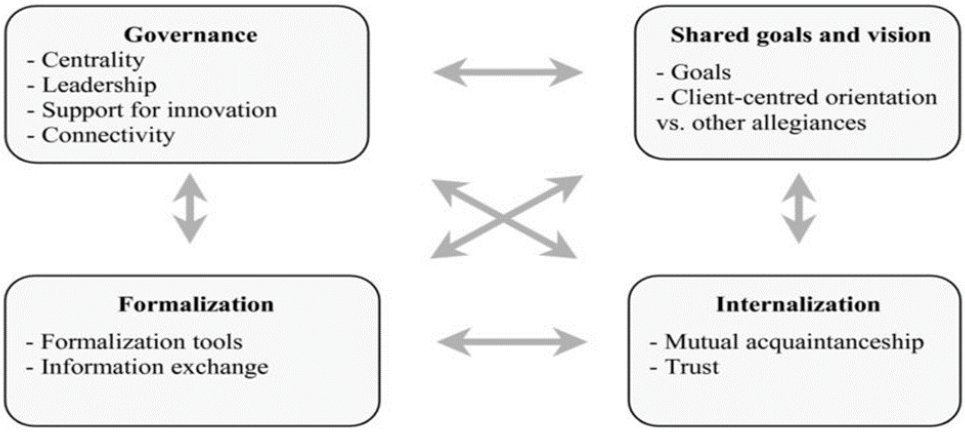

Figure 1. The four-dimensional model of collaboration. Permission to utilize figure received on October 23, 2017, from Danielle D'Amour.

Origin of Structuration Model of Collaboration

This model is a component of the broader framework of interprofessional education for collaborative patient-centered practice (IECPCP) developed by D'Amour and Oandasan (2005; see Figure 2). The IECPCP framework is made up of two streams: one for education and one for professional practice. The educational stream deals with various teaching, institutional, and systemic factors that relate to the health professional learner's capacity to become a competent, collaborative practitioner (D'Amour & Oandasan, 2005). The learner is of primary importance in this stream, and the focus is on interprofessional education (IPE) opportunities. Although research has demonstrated that

education is an important avenue to explore, education was not the focus of my research study (Cox, Cuff, Brandt, Reeves, & Zierler, 2016; DeMatteo & Reeves, 2013; Travaglia, Nugus, Greenfield, Westbrook, & Braithwaite, 2011).

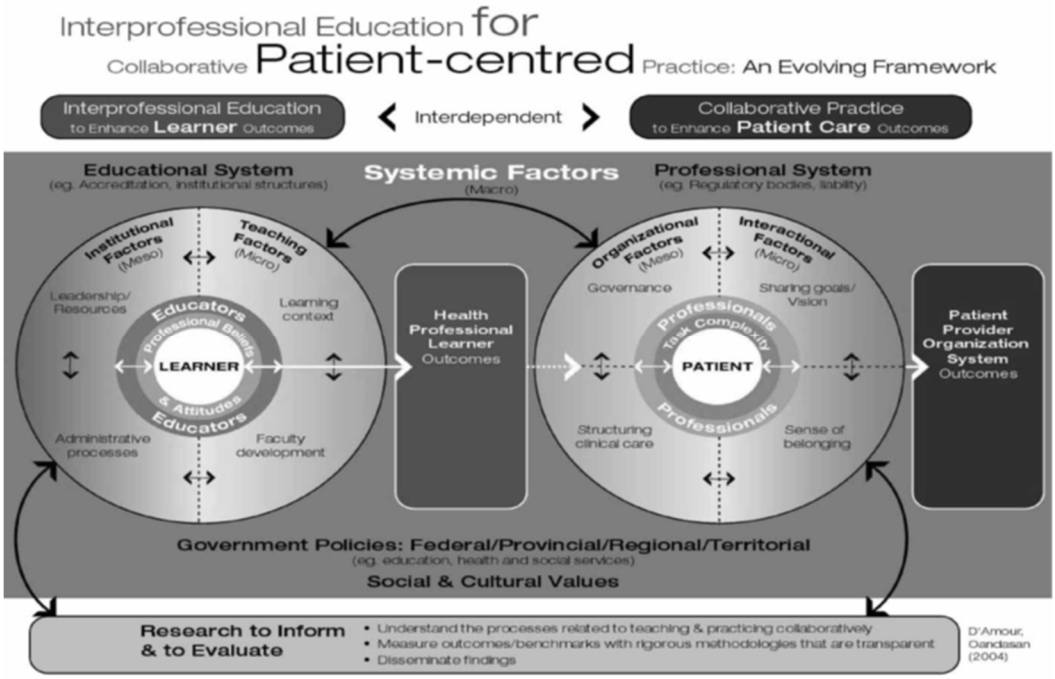

Figure 2. Interprofessional education for collaborative patient-centered practice (IECPCP). Permission to utilize figure received on October 23, 2017, from Danielle D'Amour.

The interdependency of these two streams is essential. A healthcare professional (or student) needs both the education, and the opportunity to learn and practice the skills necessary to become a proficient, collaborative partner. The professional beliefs or biases and the attitudes of both the educators and the learners can influence collaborative competencies (D'Amour & Oandasan, 2005). For example, an educator may believe that the physician holds ultimate authority and the media may portray this same value which then influences how collaboration is taught or understood by healthcare professionals. The IECPCP framework illustrates the many factors that are involved in developing

collaborative practices. It is for this reason that I utilized only one component of the model in this study.

The second stream of the IECPCP framework demonstrates the process through which health professionals build collaboration in practice. D'Amour and Oandasan (2005) stated that collaboration is complex as it involves human dynamics. The interactions between the various professionals affect the care that the patient, who is at the center of the collaborative practice stream, receives (D'Amour & Oandasan, 2005). This stream also includes interactional, organizational, and systemic factors. The interactional component is important for my study as one of the prime objectives of collaborative practice is sharing common goals, common vison and developing a sense of belonging. Team members need to develop strong bonds and work together respectfully and in a trustworthy manner to achieve a cohesive focus (D'Amour & Oandasan, 2005). To attain this bond and work in collaboration, members must be familiar with each other's roles, responsibilities, and professional affiliations or areas of expertise. This bond is developed through the internalization component of the structuration model of collaboration (D'Amour et al., 2008).

The main dimension of focus for my study was the internalization factor. Internalization, as suggested by D'Amour et al. (2008), involves professionals being aware of and managing their interdependencies. This awareness then translates into a sense of belonging, increased knowledge of each other's values and discipline, and mutual trust. D'Amour et al. (2008) alluded to the idea that although collaboration improves client outcomes, professionals want to maintain a sense of autonomy and

control over their practice. This balance between collaboration and autonomy is one of the core components of the internalization factor for this model. Internalization has two indicators: mutual acquaintanceship and trust (D'Amour et al., 2008). Mutual acquaintanceship involves knowing each other personally and professionally. Personal knowledge requires one to respect the values and level of competence of others within the team. Professional knowledge requires an awareness of the distinctions between disciplines. For example, one must be aware of the disciplinary frame of reference, the approach to care, and the scope of practice of all members of the team (D'Amour et al., 2008). Professionals utilize both formal and informal interactions to develop familiarization. Communication in these interactions must be authentic, constructive, and open to foster trust and respect among team members (Légaré et al., 2011; Travaglia et al., 2011). Knowledge and respect for each professional's role can decrease territorial barriers currently present in today's health care system and improve collaboration (San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005).

Application of D'Amour and Oandasan's Model to Collaboration Research

D'Amour and Oandasan's (2005) model has been used in various research studies and settings to examine collaboration. Drummond, Abbott, Williamson, and Somji (2012) utilized this model to examine how academic family medicine clinics in Alberta implemented interprofessional practice. The goal of this qualitative study (semi-structured focus group interviews) was to explore the status of interprofessional practice in four different family medicine clinics and to understand the processes undertaken to implement interprofessional education (Drummond et al., 2012). The author's data

supported the model's components of shared goals and vision, sense of belonging, governance (leadership) and how clinical care was structured (Drummond et al., 2012).

Tan, Stewart, Elliott, and George (2013) also conducted a qualitative study and utilized D'Amour and Oandasan's model to interpret the results. The research site included two general practice clinics in Australia. One practice was a private general practice, and the other was a community clinic (Tan et al., 2013). The authors of this study explored the experiences of clinic staff, pharmacists, and patients. The model supported the themes identified which included environment, integration and professional relationships, pharmacist attributes, staff and patient benefits, and logistical challenges (Tan et al., 2013). The authors provided examples which fit within each of the four dimensions of D'Amour's model (D'Amour et al., 2008; Tan et al., 2013).

More recently, Toh, Lai, Othman, Wong, Low, and Anderson (2016) conducted a qualitative study to examine the perspectives of patients, nurses, pharmacists, doctors, and policymakers from a primary care clinic located within a hospital in Malaysia. The authors were interested in identifying the level of collaboration and areas for improving collaboration particularly with pharmacists around the issue of osteoporosis management (Toh et al., 2016). The main themes identified were divided and discussed based on the four components of D'Amour's model. Based on the model, this primary care clinic was in the early stages of developing an interprofessional collaborative practice for osteoporosis management (Toh et al., 2016).

Researchers have also utilized the structuration model of collaboration developed by D'Amour (as described in D'Amour et al., 2008) in quantitative studies. Nuno-Solinis,

Zabalegui, Rodriguez, Arce, and Gagnon (2013) conducted a one-group pre/posttest pre-experimental study to measure the degree of collaboration among doctors and nurses from various health care teams in Basque Country. The purpose of this study was to measure the degree of change in level of collaboration after the establishment of an integrated healthcare organization and the questionnaire utilized was based on D'Amour's framework (Nuno-Solinis et al., 2013). Nuno-Solinis et al. (2013) discovered an improvement in the level of collaboration; however, limitations of the study included small sample size, and an adjustment was made to the instrument between the pre/post-test administration. Hamlan (2015) conducted a study that examined the relationship between nurses' perceptions about interprofessional collaboration, job satisfaction, and patient safety climate in a large tertiary care hospital in Ontario, Canada. Again, the researcher utilized an instrument to measure collaboration that was based on D'Amour's framework (Hamlan, 2015).

Rationale for the Use of D'Amour's Theory

The structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008) was utilized in this study to guide the interpretation of results. Although other models regarding collaboration exist (Gaboury et al., 2009; Kilpatrick, Lavoie-Tremblay, Lamothe, Ritchie, & Doran, 2012; Légaré et al., 2011; Misfeldt, Suter, Oelke, & Hepp, 2017; Mulvale et al., 2016; Stutsky & Laschinger, 2014), this model provided a suitable conceptual approach for this research because it originated with a focus on primary health care, and has been influential in supporting

interdisciplinary collaboration efforts in Canada and internationally (Interprofessional Education Collaborative Expert Panel, 2011; Nolte, 2005; Oandasan et al., 2004).

Interprofessionality is an overarching concept of this model and D'Amour developed it as part of the background work for initiatives by Health Canada to foster interprofessional education and interprofessional collaborative practice. D'Amour and Oandasan, (2005) defined interprofessionality as:

> the development of a cohesive practice between professionals from different disciplines. It is the process by which professionals reflect on and develop ways of practicing that provides an integrated and cohesive answer to the needs of the client/family/population…. Interprofessionality requires a paradigm shift, since interprofessional practice has unique characteristics in terms of values, codes of conduct, and ways of working. These characteristics must be elucidated. (p. 9)

Travaglia et al. (2011) stated that interprofessionalism is a relatively new concept in health care reform. This concept was developed in response to a declining workforce, quality and safety of care issues, and professional power dynamics (Travaglia et al., 2011). The fit between interprofessionalism and the power dynamics (respect in particular) among the various professionals working in FHTs and CHCs in Ontario was the reason I chose this model as a guide for my study.

Literature Review of Key Variables

Many studies have been conducted to determine the dimensions of interprofessional collaboration (IPC) and to understand the benefits and challenges of IPC in multiple practice settings. Given the emphasis that policymakers are currently

placing on the development of more interprofessional teams, it is important to understand the relationships between perceptions and behaviors (Hart, 2015). Understanding this relationship can provide insight into the reasons why professionals are reluctant to embrace interprofessional practice fully. Therefore, the key variables chosen for my study included collaboration, interprofessional team members, and mutual respect. In the following section, I provided a description of how researchers have previously explored these concepts in the literature. I also explained the limitations identified in the literature and the necessity for further research.

Collaboration

The World Health Organization (WHO) has expressed the importance of collaboration to meet the goals of primary health care and has supported interprofessional education to improve teamwork among health care professionals since 1973 (WHO, as cited in Lapkin et al., 2011). However, each member of the healthcare team can present with differing viewpoints that influence the ability to collaborate genuinely (Engel & Prentice, 2013). In a literature review conducted by D'Amour et al. (2005), the authors demonstrated that collaboration is a multifaceted process. For instance, the word collaboration implies a harmonious, collective action built on trust and geared towards the attainment of a common goal (D'Amour et al., 2005). In a healthcare setting, collaboration is complicated by the fact that it involves various professionals who have been taught to manage client care based on discipline-specific frameworks (D'Amour et al., 2005; MacDonald et al., 2010; Sexton, & Baessler, 2016). Collaboration requires changing this paradigm. Another part of the complexity surrounding this concept lies in

the fact that there can be varying degrees of collaboration and varying definitions of collaboration. A clearer understanding of the dynamics of interprofessional teams is required to understand the collaborative process thoroughly.

Collaboration, for this study, was defined as a "dynamic, transforming process of creating a power-sharing partnership for pervasive application in health care practice" (Sullivan, 1998, p. 65). Reeves, Lewin, and Espin (2010) defined collaboration as "an active and ongoing partnership between people from diverse backgrounds who work together to solve problems or provide services" (p.xii). Collaboration involves all members working collegially as a team in an environment of trust, respect, and open communication which enables the shared knowledge and skills of the providers to synergistically influence the client care provided (Conway et al., 1998; Sangster-Gromley et al., 2015). Engel and Prentice (2013) stressed the importance of collaboration involving individuals who come together voluntarily rather than due to obligation or because they were mandated to do so. Therefore, some of the critical attributes of a collaborative practice include coordination, cooperation, shared decision making, and partnerships (Henneman, 1995). Mandating relationships that depend more on character, relationships, and voluntarism than on knowledge and finances may be why little progress has been made in understanding or influencing interprofessional collaboration (Engel & Prentice, 2013).

Definitions of collaboration in the literature described collaboration as being built on communication, shared decision-making, and respecting the equality of all team members. However, researchers have demonstrated that there remains a tension between

this theoretical ideal and how collaboration occurs between healthcare professionals (Schadewaldt, McInnes, Hiller, & Gardner, 2013). The different socialization processes and legislation requirements of each profession influence collaborative practice (Regan, Orchard, Khalili, Brunton, & Leslie, 2015). Therefore, how different healthcare professionals perceive the level of collaboration within their work environments required further examination.

Interprofessional Collaboration (IPC)

IPC "is a type of interprofessional work which involves different health and social work professions who regularly come together to solve problems or provide services" (Reeves et al., 2010, p. xiii). In a concept analysis of IPC, Bookey-Bassett et al. (2016) echoed the fact that IPC remains an evolving concept. These authors, as well as others, reinforced the need for further research to derive a better understanding of the dynamics of collaborating teams and the processes involved (Bookey-Bassett et al., 2016; D'Amour et al., 2005; Morgan et al., 2015; Perreault & Careau, 2012). Historically researchers have used inconsistent definitions and conceptualization of IPC. This lack of consistency contributed to the inability to integrate the research and draw parallels between studies and obtain generalizable results (Bookey-Bassett et al., 2016),

Further research is also required to determine best practices for measuring IPC in multiple healthcare settings with members from different disciplines (Al Sayah, Szafran, Robertson, Bell, & Williams, 2014; Bookey-Bassett et al., 2016; D'Amour et al., 2005, Perreault & Careau, 2012). Thannhauser et al. (2010) discovered that many researchers were developing new tools to measure IPC for their studies which limits the ability to

create a solid knowledge base. Perreault and Careau (2012) suggested the need to use existing theories and tools for future research rather than continuing on parallel tracks. Researchers indicated that professionals need to develop teamwork skills, and future professionals need to be instructed on interprofessional role identification and collaboration (Sangster-Gormley et al., 2015; Sexton, & Baessler, 2016). If IPC is an expected standard of practice for all healthcare professionals (Canadian Interprofessional Health Collaborative, 2010; World Health Organization, 2010), researchers need to conduct more studies to understand the broad range of human dynamics that act as barriers and facilitators of working within interprofessional teams.

There is strong support for interprofessional collaboration in Canada amongst many health care disciplines (Health Care Innovative Working Group, 2012). The Canadian healthcare system is based on accessibility or equal access for all citizens (Engel & Prentice, 2013). IPC in Canada introduces a way to reduce unnecessary costs and to better meet the needs of vulnerable and underserviced populations (Engel & Prentice, 2013). In the United States and other developed countries, IPC was introduced to address quality of care (Engel & Prentice, 2013). The goal of IPC is to improve patient safety and reduce costs by decreasing medical errors (Engel & Prentice, 2013).

The Canadian Nurses Association (CAN, 2011) produced a position statement that reinforced the importance of incorporating IPC models to improve access and delivery of safe, effective health care in Canada. Nurses are instructed to collaborate with other health care professionals to improve patient care while also recognizing and respecting the knowledge skills and perspectives of all (CAN, 2011). A guiding principle

of the College of Physicians and Surgeons of Ontario (CPSO, 2014) is cooperation. The members of the college define cooperation as "seeking out and working with our partners – other health-care institutions, associations and medical schools, etc. – to ensure collaborative commitment, focus and shared resources for the common good of the profession and public" (CPSO, 2014., para 14). One of the CPSO's strategic plans for 2015-2018 is to participate in collaborative approaches to ensure consistent quality of care across the province (CPSO, 2014b). The College of Physiotherapist of Ontario (2017) also has a statement about collaborative practice. The statement implies that a physiotherapist must ensure that his or her treatment is compatible with the care being provided by others. The physiotherapist does this by understanding the roles and responsibilities of other care providers and seeking and providing clarification of treatment as relevant to care provided by others (College of Physiotherapist of Ontario, 2017). The Ontario College of Pharmacists (n.d.) has a similar mandate which is to protect and serve the public interest, with the goal of ensuring safe and quality care for patients across the province… [with a] commitment to putting patients first and by collaborating with stakeholders and professionals" (homepage). Registered dieticians (RD) in Ontario provided a statement that "collaboration with clients, caregivers, and other health professionals is central to dietetic practice" and that "this collaboration occurs whether the RD works in a private practice or as a member of a health care team" (College of Dieticians of Ontario, 2017, para.1). A review of other professional colleges, such as social workers, did not reveal similar statements regarding collaboration. Social workers are in a position of having to carve out their roles in primary health care teams

and will need to promote a clear description of their roles and the unique perspectives they can bring to IPC (Ambrose-Miller & Ashcroft, 2016).

Regan et al. (2015) utilized a mix-methods approach to conduct a policy analysis from the professional regulatory colleges and councils in Ontario. The purpose of this method was to determine the extent to which college members are ready to collaborate with one another and the extent to which the colleges' policies enable the members to participate in mandated IPC (Regan et al., 2015). The authors demonstrated that although there is commitment to the ideal of IPC, there are no formal frameworks to guide what constitutes IPC at a regulatory level (Regan et al., 2015). This lack of consensus or guidance allows for the wide variations in practice that researchers observe in IPC. The National Interprofessional Competency Framework (Canadian Interprofessional Health Collaborative [CIHC], 2010) was developed to encourage professionals to use consistent language and concepts in both education and practice. The framework consists of four central domains including: "role clarification, team functioning, addressing interprofessional conflict and collaborative leadership; and two domains that support the others related to: interprofessional communication and patient/client/family/community-centered care" (CIHC, 2010, p. 23). One of the key competencies for the CIHC (2010) study was the knowledge of professional roles of others. MacDonald et al. (2010) examined knowledge of professional roles of others in relation to the professional education of nursing students. The authors stated that a behavioral indicator of this competency is the practitioner's respect for the roles, expertise, and unique contributions of the other team members (MacDonald et al., 2010). Respect implies trust in each

other's skills, allowing each professional to work to his or her full scope of practice, accepting each other's assessment and not duplicating tasks (MacDonald et al., 2010). Respect requires the professional to self-reflect and understand where his/her competency ends, and another's begins because in the healthcare field there is always the potential for overlapping roles (MacDonald et al., 2010).

McInnes et al. (2015) conducted an integrative literature review to determine what facilitates and hinders the collaboration among nurses and physicians working in general practice. The authors searched for peer-reviewed literature published between 2000-2014 and only included eleven papers in the review (McInnes et al., 2015). Due to the complexities that the researchers encountered in the analysis of collaboration, the authors were unable to identify comparable studies. Therefore, a meta-analysis was not possible. However, common themes included a) roles and responsibilities, b) respect, trust and communication, and c) hierarchy, education, and liability (McInnes et al., 2015). Similar themes were identified in a study by Al Sayah et al. (2014). These authors conducted an ethnographic study utilizing semi-structured individual interviews to examine the perceptive of nurses working in primary care settings in Canada on factors that affect interdisciplinary teamwork (Al Sayah et al., 2014). The four themes identified were: a) the influence of the organization/leadership (mandate and roles descriptions), b) team relationships (communication, trust, and respect), c) process/support (referral process, large clientele), and d) the physical environment (Al Sayah et al., 2014). The vagueness of roles which leads to lack of trust or mutual respect and lack of communication

between team members were the most influential factors identified in poor team functioning (Al Sayah et al., 2014).

In a quantitative study examining the correlation between nurses' professional values (such as trust, professionalism, and caring) and their attitudes towards nurse-physician collaboration at a tertiary hospital (involving inpatient, intensive, and outpatient care) in the United States, Brown, Lindell, Dolansky, and Garber (2015) discovered a positive relation between these two factors ($r = .26$, $p < .01$). A point of interest discovered in this study was that this positive relationship was also influenced by previous interprofessional education (IPE) experience and with having a master's or higher level of nursing education (Brown et al., 2015). The authors suggested that nurses with lower levels of education and more involvement in direct patient care viewed doctors as more authoritarian and less collaborative, and previous IPE experience also resulted in lower scores on collaboration (Brown et al., 2015). Attitude is influenced by many factors and may not be altered by educational opportunities alone. For instance, Regan, Laschinger, and Wong (2016) conducted a predictive non-experimental design to examine to influence of empowerment, authentic leadership, and professional practice environments on nurses' perception of IPC. Reliable instruments were utilized to measure each of these concepts (Regan et al., 2016). Most nurses in this study worked in hospitals and long-term care facilities and had an average of 22 years' experience (Regan et al., 2016). Higher levels of these three concepts were predictive of higher perceived IPC (adjusted $r^2 = .452$; Regan et al., 2015, p. E58). The authors of this study also stressed the importance of having control over one's practice, such as the ability to make autonomous

decisions regarding client care, as being influential in shaping a nurse's ability to improve IPC (Regan et al., 2016).

Sangster-Gormley et al. (2015) utilized a multi-phase mixed method approach to evaluate the integration of nurse practitioners (NPs) into the health care system in British Columbia and to determine what changes occurred in these practices with this addition (Sangster-Gormely et al., 2015). The three themes related to collaboration that Sangster-Gormley et al. (2015) identified were a) expectation for the role (roles and responsibilities), b) IPC (teamwork or structure of NP and physician working relationship), and c) appropriateness of NP practice (respect, trust, and communication). Schadewaldt et al. (2013) conducted an integrative review to determine the views and experiences of a similar population (nurse practitioners and medical practitioners) but in a primary health care setting. These authors reviewed 27 studies which took place in seven different countries. There was an equal number of qualitative and quantitative studies suggesting the importance and necessity of both methodologies (Schadewaldt et al., 2013). The main barrier to collaboration that Schadewaldt et al. (2013) identified was the lack of understanding by medical practitioners regarding the unique role of the NP. This lack of understanding decreased the level of confidence or trust (respect) between professionals and exemplified barriers to collaboration such as hierarchical relationships and power struggles (Schadewaldt et al., 2013). Collaboration in this review did not reach the ideal of a collegial relationship with reciprocal discussions about client care and issues. The relationship was more geared to shared office space, interdependent encounters (NPs asking for advice), and the hierarchical or supervisory involvement of

the medical practitioner (Schadewaldt et al., 2013). In these two studies, as well as others, the physicians were more satisfied with the collaboration process than NPs (Donald et al., 2009; Sangster-Gormley et al., 2015; Schadewaldt et al., 2013). Similarly, Sollami, Caricati, and Sarli (2015) conducted a meta-analysis to investigate the differences in IPC ratings between nurses and physicians. Physicians perceived more collaborative interactions compared to nurses, but nurses had more positive attitudes towards IPC (Sollami., Caricati, & Sarli, 2015). The reason suggested for this difference in these studies is the varying interpretations and perceptions of IPC in actual practice.

Multiple studies have been conducted to determine if interventions aimed at improving IPC demonstrate improved delivery of the health care services, improved practice, or improved health outcomes (Braithwaite et al., 2013; Liaw, Siau, Zhou, & Lau, 2014; Museux, Dumont, Careau, & Milot, 2016). In a recently published Cochrane report, which included the review of nine randomized controlled studies, the authors concluded that there was insufficient evidence to draw any clear conclusions on the effects of inventions to improve IPC especially regarding collaborative working (Reeves, Pelone, Harrison, Goldman, & Zwarenstein, 2017). Some of the interventions reviewed included externally facilitated activities such as reflective activities, interprofessional rounds or meetings, and completing interprofessional checklists (Reeves et al., 2017). While some interventions assisted in stronger adherence to best practice guidelines and use of resources, most interventions had limited effect on the perceptions of collaboration among health and social work professionals (Reeves et al., 2017). This review validates the need for more research into the factors that affect IPC.

Interprofessional team members

Health care has undergone many changes over the past few decades. How professionals deliver care, where professionals provide care, how health care is paid, and who provides this care looks much different today than in the past. The challenges to present day practitioners is increasing as chronic disease management becomes more prevalent and complex as the population ages (Bookey-Bassett et al., 2016). There has never been a more appropriate time to combine professional strengths and work together as a team (Kar, 2014). The need to be more fiscally responsible and decrease medical errors has led policymakers to develop new models of practice (Engel & Prentice, 2013). One such approach is an interprofessional practice model.

For my research, I used the term interprofessional rather than interdisciplinary or multidisciplinary. The term multidisciplinary differs from interprofessional "as the team members are composed from different academic disciplines (psychology, sociology, mathematics) rather than from different professions such as medicine, nursing and social work" (Reeves et al., 2010, p. xiv). A multidisciplinary team differs from an interprofessional team because although it is a group of health professionals working together, they each make autonomous or separate decisions (McCallin, 2005). I defined interprofessional in this study as multiple workers from varied backgrounds with distinctive professional values working together to provide services or to solve problems (Morgan et al., 2015). An interprofessional team consists of different professions with specialized knowledge, skills, and abilities, and each member contributes to a common goal which could not achieve if a particular profession acts alone (WHO, 2010).

Interprofessional teams are composed of two or more different health care professions who share a team identity and work closely together in an integrated and interdependent manner to resolve issues and deliver services (Reeves et al., 2010, p. xiv). Orchard et al. (2018) define interprofessional team members as any interaction between one or more health care professionals on a regular basis for providing patient care. Team members may include: physicians, pharmacists, nurses (registered and practical), nurse practitioners, dieticians, occupational therapist, physical therapists, social workers, psychologists, health educators as well as others. For my study, I included health and social work professionals that work within the same organization.

Mutual Respect

As stated by Browne (1993), "defining respect may seem rhetorical, its meaning is often implicitly assumed" (p. 311). Respect is a universally accepted ethical virtue and is a fundamental component of any professional practice (Faulkner & Laschinger, 2008; Tsou, Shih, & Ho, 2015). Respect is a term that implies positive action and is a universally accepted ethical virtue (Browne, 1993; Faulkner & Laschinger, 2008). It is defined as "a feeling or understanding that someone or something is important, serious, etc., and should be treated in an appropriate way" (Merriam-Webster Dictionary, n.d.). Some related concepts to respect are admiration, esteem, and reverence (Browne, 1993). However, these concepts may be more related to circumstances whereas respect is viewed more as a right than a reward (Browne 1993).

Respect for the competence of other professionals in the team may be fundamental to the harmonization of interdependent work processes (Gittell, 2006). In

seminal research studies conducted by Crabtree et al. (1998; 2009), the researchers identified respect as a modifier of information sharing and an essential component of effective workplace relationships. Mutual respect helps build a sense of equal partnership which in turn can facilitate more effective collaboration (Gittell, 2006). Mutual respect for my study utilized the meaning provided by Gittell (2006) who defined respect as "valuing the contributions of others involved in the work process and ..consider[ing] the impact of [one's] own actions on the ability of others to do their work" (p. 87). Respect in my study was measured or operationalized by using a modified version of the ERIQ, and higher degrees of respect was represented by higher total scores (Seigrist, Li, & Montano, 2014). Lower scores represent feelings of disrespect. People feel disrespected when they are overlooked, ignored, or dismissed lightly or inconsiderately (Laschinger, 2004; Laschinger & Finegan, 2005). Respect is fundamental to employees' trust of others (Mishra & Spreitzer, 1998).

DiCicco-Bloom and DiCicco-Bloom (2016) support this concept in a qualitative study they conducted utilizing 27 primary care practices. In their study, respectful interactions were exemplified by honesty, self-confidence, and a genuine appreciation of others (DiCicco-Bloom & DiCicco-Bloom, 2016). Based on the observation data obtained from this study, the authors distinguished the differences between practices that demonstrated low, uneven, and high degrees of mutual respect (DiCicco-Bloom & DiCicco-Bloom, 2016). Practices with low levels of mutual respect held poorly attended practice meetings, especially among the physicians. This absence of physician participation represented a lack of appreciation to the other members of the team and

created barriers for honest dialogue (DiCicco-Bloom & DiCicco-Bloom, 2016). In contrast, in practices which demonstrated high levels of mutual respect, the interdisciplinary members sought out support from others regardless of comfort level and confirmed more fluid alliancing connections (DiCicco-Bloom & DiCicco-Bloom, 2016). Employees who feel respected are more likely to work closely with others to identify and reach the shared goals (Schadewaldt et al., 2013).

Other studies have demonstrated a correlation between respect and empowerment (DeCicci et al., 2006; Faulkner & Laschinger, 2008; Laschinger & Finegan, 2005), respect and organizational justice (Laschinger, 2004), and perceived respect and role ambiguity during student placements (Portoghese et al., 2014). Results of these studies are related to studies conducted by Al Sayah et al. (2014), Brown et al. (2014), Gocan et al. (2014) and Regan et al. (2016) because empowerment implies autonomy or control over one's works environment, and improved competence in one's ability to perform his/her job. Nurses who felt in control of their work practices and were involved in decision-making processes perceived higher degrees of respect and commitment to the organization (DeCicco et al., 2006; Faulkner & Laschinger, 2008; Laschinger & Finegan, 2005). Nursing students who experienced role conflict or uncertainty felt disrespected demonstrating the need to have well-defined roles, and strong, supportive, working relationships with members of the professional community (Portoghese et al., 2014). Laschinger (2004) identified a similar link between positive work environments and higher degrees of perceived respect among nurses working in Ontario hospitals.

Organizational justice or including nurses in making decisions that affect their job, increased perceptions of respect (Laschinger, 2004).

A qualitative study conducted by Morris and Matthews (2014) examined the perceptions of IPC experienced by dieticians and their colleagues in rural hospitals in southwestern Ontario. Common themes identified were communication, respect, leadership, benefits of interprofessional teams, and the pros and cons of working in a rural hospital setting. The researchers assessed respect by asking "how do you recognize and respect the role of other health care professionals on your team?" (Morris & Matthew, 2014, p. 174). Participants stated that understanding and appreciating the different scopes of practice was instrumental in perceptions of respect (Morris & Matthews, 2014). The authors commented that practices that had younger physicians seemed to shift cultural beliefs from a hierarchical model of physician dominance to a more collaborative model where each profession felt supported and respected (Morris & Matthews, 2014). Similarly, an integrative review by Schadewaldt et al. (2013) examined the perceptions of nurse practitioners (NPs) and medical practitioners (MPs), which revealed that collaboration and respect were demonstrated more frequently when the MPs had experience working with NPs. In this same review, NPs felt more respected when MPs referred clients to them and when MPs also sought advice from the NPs demonstrating a reciprocal relationship (Schadewaldt et al., 2013). As education and practice settings have changed in recent years, medical practitioners presently have more experience working with a variety of social and health care professionals than 20 years ago (Schadewaldt et al., 2013). Therefore, more research is required to determine if the

perceptions of respect are more positive among all professionals working within newly developed health care setting such as FHTS and CHCs.

IPC and Respect in FHTs and CHCs

Current literature has identified a relationship between IPC and mutual respect, but research to identify the perception of this relationship among multiple members of the interprofessional teams working in one location, such as in FHTs and CHCs, is limited. CHCs originated in the 1980s and typically serve rural, low-income, or minority populations (Rosser, Colwill, Kasperski, & Wilson, 2011). Physicians employed by the CHC are reimbursed by salary, and practices are likely to have a variety of health care providers or interprofessional team members (Rosser et al., 2011). Similarly, FHTs' utilize interprofessional members but follow a more traditional practice model of serving general populations (Rosser et al., 2011). Physicians working in these practice settings are paid by a "blended funding formula based on capitation with additional financial incentives" (Rosser et al., 2011, p. 166). In both models, interprofessional team members assist the family physicians by expanding the scope of services provided in these practice settings. More research is required to determine the factors that facilitate or the barriers that inhibit the quality of collaboration in these practice settings.

In a seminal study conducted by Sicotte, D'Amour, and Moreault (2002), the authors examined interdisciplinary collaboration among the entire population of CHCs (157 in total) in Quebec. Surveys were mailed to the key informants (program coordinators) within these agencies (Sicotte et al., 2002). The authors identified a positive but very modest achievement (3.5 out of 5) of interdisciplinary collaboration (Sicotte et

al., 2002). Although the results were disappointing, the authors of this research were able to demonstrate a link between collaboration and workgroups internal dynamics (Sicotte et al., 2002). In other words, the authors were able to demonstrate that although collaboration is valued, there remains ongoing conflict or competition between different professions (Sicotte et al., 2002). Mutual respect can be considered an adjunct to this competition between professions and was, therefore, the focus of my study.

In a more recent quantitative study, Rayner and Muldoon (2017) examined the perceptions of team functioning from various staff members working in CHCs in Ontario. This study was similar in design to my study in that online surveys were administered to managers and staff within 58, out of a potential 75, CHCs throughout Ontario (Rayner & Muldoon, 2017). The study differs in that the focus was on team climate (organizational policies, practices, and procedures within the team), organizational justice (which measured perceptions of fairness, equity, and respect), and organizational citizenship (staff turnover, productivity, and efficiencies). These concepts, however, are closely related to collaboration and respect. A total of 674 responses were received, and the majority (57%) were from family physicians (FP), nurses, and nurse practitioners (NP). Overall, there was a positive perception of team climate, organizational justice, and organizational citizenship (Rayner & Muldoon, 2017). However, NPs (score: 4.5) and FPs (score: 4.4) had lower scores from procedural justice (less fairness in decision making) compared to the other staff members (ranging from 5.0-5.4; Rayner & Muldoon, 2017). Unfortunately, the authors were unable to identify any linkages to team climate, organizational justice and citizenship and outcomes of care provided.

Gocan et al. (2014) conducted a review of the literature to determine team functioning in FHTs throughout Ontario. The mandate of FHTs is to improve access to primary health care, improve patient health outcomes, and reduce health care costs (Gocan et al., 2014). In the eleven studies examined, the majority being qualitative studies, the authors discovered that while team collaboration was occurring, it has not reached its full potential (Gocan et al., 2014). Factors that effected IPC included the funding model, professional preparation (such as education) for collaborative practice, and team determinants (Gocan et al., 2014). A common theme that the authors identified and that I have previously discussed is the need for a clear understanding of the roles of each member so that the client would be seen by the right professional (Gocan et al., 2014). This component fits with the concept of respect. In the reviewed studies, strong leadership provided an environment that fostered mutual trust and respect and decreased hierarchical power struggles and improved collaboration (Gocan et al., 2014). Morgan et al. (2015) also conducted an integrative literature review with a focus on direct observational studies of collaboration in primary health care teams. The main finding of this review was the importance of providing opportunities for informal communication in which members could share knowledge, discuss goals, and expand clinical decision making (Morgan et al., 2015). These channels of communication can provide opportunities to build respect and trust among health care professionals.

Limitations

Limitations identified when reviewing studies involving the analysis of mutual respect and interprofessional collaboration included small sample sizes, inconsistent

definition of concepts (Reeves et al., 2011), and the inconsistent use of reliable instruments (Perreault & Careau, 2012). Many research studies have combined professionals into groups due to low response rates from individual disciplines. Nurses (including Nurse Practitioners) and physicians make up the largest portion of healthcare professionals. Therefore, many studies have focused on the results obtained from surveying or observing these two groups (Brown et al., 2015; McInnes et al., 2015; Sangster-Gormley et al., 2015; Schadewaldt et al., 2013). Other studies examined specific relationships such as those between specialists and family physicians (Balmer, Boyd, & Giardino, 2010; Farmanova, Grenier, Chomienne, Hogg, & Ritchie, 2017), pharmacists and physicians (Tan et al., 2013), and dieticians and physicians; or physiotherapists and physicians (Dufour, Brown, & Lucy, 2014). One goal of my study was to obtain enough data from the various professionals to examine the differences not only between organization but also between groups.

Another limitation identified was the lack of quantitative studies that focus on respect and collaboration in unique primary health care settings such as CHCs and FHTs. Many studies have examined the relationship between professionals in hospital settings, and palliative or long-term care facilities (Hurlock-Chorostecki, Forchuk, Orchard, van Soeren, & Reeves, 2014; Morris, & Matthews, 2014). My study expanded the knowledge base by utilizing this particular practice setting.

Summary and Conclusions

In summary, my review of the literature demonstrated the linkages between collaboration, mutual respect, and interprofessional teams. My study helped fill a gap in

the literature by determining if there was a relationship between mutual respect and collaboration among members of interprofessional teams working in CHCs and FHTs throughout Ontario. From a policy perspective, my study assisted in the evaluation of collaboration and respect in these unique practice settings. My research also provided data on how well collaboration is going, detected if there was a relationship between collaboration and perceived respect, and assisted in the identification of areas that require improvement. From a methodological perspective, my study expanded the knowledge base by utilizing existing theories and reliable, validated instruments. The knowledge obtained can influence practice, education, and guide future research.

I provided further details regarding the research design, the operationalization of the study variables, the methodology used for this research project, and the recruitment of participants in Chapter 3. I also described the threats to the validity of this study and any potential ethical issues.

Chapter 3: Research Method

Introduction

In this chapter, I described the research method chosen to conduct my study which was to explore the relationship between perceptions of collaboration and mutual respect among members of interprofessional teams from FHTs and CHCs throughout Ontario. To analyze this issue, I utilized a quantitative research design. An assessment of the perceived relationship between collaboration and mutual respect can aid in the development of interventions to improve interprofessional practice. In the sections of this chapter, I introduced the study design and rationale, methodology, data collection and analysis plan, and discussed the various threats to validity.

Research Design and Rationale

A correlational, descriptive, quantitative research design was utilized to conduct this study (Creswell, 2009; Grove et al., 2013). I chose a quantitative design because it allowed me to ascertain if there was a relationship between the variables, mutual respect and collaboration, among interprofessional team members working in CHCs and FHTs throughout Ontario. Mutual respect was defined as valuing "the contributions of others who are involved in the work process and to consider the impact of [one's] own actions on the ability of others to do their work" (Gittell, 2006, p. 87). Respect was measured utilizing a modified esteem subscale from the ERIQ developed by Siegrist (1996). The other variable, collaboration, was defined as a "dynamic, transforming process of creating a power-sharing partnership for pervasive application in health care practice" (Sullivan, 1998, p. 65) and was measured utilizing the AITCS-II developed by Orchard et al.

(2018). There was no manipulation of the environment in which these variables are already occurring which met the requirements of a descriptive correlational design (Grove et al., 2013; Field, 2013).

The Internet was used to collect data from participants in a cross-sectional self-administered survey design. I distributed this survey to healthcare professionals working in FHTs and CHCs throughout Ontario, Canada. Survey research provides a numeric explanation of attitudes or perceptions (Creswell, 2009). The purpose of my study was to determine if mutual respect was correlated to interprofessional collaboration. Therefore, I utilized a correlational quantitative study design as this was the most appropriate method to use to address this research problem. A cross-sectional design was fitting for this study as it allowed for collecting information on a population during a fixed point in time, was economical, and permitted a rapid turnaround in data collection (Creswell, 2009). This study required a minimal time commitment (approximately 10 minutes) to complete the survey. Consent was required for participants to log on to the site and complete the survey. Reading and responding to the consent process took three to five minutes, completing demographic data took another three minutes, and the estimated time required to complete the questionnaire was 10 minutes. Resources necessary included computer and internet access.

Methodology

Population

For this study, I used healthcare professionals working in CHCs and FHTs throughout Ontario. I gained access to this population through the MOHLTC list serve.

This government-based website provided contact numbers and hyperlinks for all the FHTs and CHCs that were presently functioning in Ontario. I selected professionals through convenience sampling from an approximate total of 184 FHTs and 87 CHCs in Ontario. It was difficult to ascertain the exact size of the population as each team or center employed different numbers and different types of healthcare professionals. For instance, some teams or centers may have two or more physicians, nurses, nurse practitioners, dieticians and social workers. FHTs or CHCs may or may not employ physical or occupational therapists and other allied health professionals. This variance may have affected the number of responses obtained from the various professions that make up the interprofessional teams. Any health care professional working in these environments was eligible for participation in the study.

Sampling and Sampling Procedures

I conducted convenience or purposive sampling for this study. Convenience sampling uses subjects in a population that is conveniently available (Creswell, 2009; Frankfort-Nachmais, Nachmias, & DeWaard, 2015). I utilized the FHTs and CHCs in Ontario that responded to my invitation to participate in this study. Purposive sampling occurred as I attempted to contact every available CHC and FHT in Ontario, and the subjects who work within these agencies had an equal opportunity of being participants in the study. The assumption being that the sample obtained was representative of the agency as a whole (Frankfort-Nachmais et al., 2015). The demographic data obtained from the participants aided in determining similarities and dissimilarities among the professionals working within these environments.

The list of FHTs and CHCs in Ontario was randomly ordered by region and approached by telephone or email to control for bias. After three failed attempts to reach the FHT or CHC manager or executive director to discuss the study, I moved on to the next FHT or CHC in the list. I requested permission to survey potential participants from the manager or executive director.

Inclusion and Exclusion Criteria

Inclusion criteria included being a health (physical, social, or mental) care professional working within a FHT or a CHC in Ontario, being over the age of 18 years, and able to understand and respond in English. Therefore, to ensure that the professionals who responded to the survey met the inclusion criteria, the initial questions on the survey addressed these areas. Exclusion criteria included professional not working in FHTs and CHCs, professionals who could not read or respond in English, those under the age of 18, and any health care students working in these environments during the time of the study. I excluded students from the study due to the lack of reliability testing of the AITCS-II instrument with this population.

Sample Size

A review of the literature was conducted to determine sample size. In the studies reviewed, I realized that large effect sizes were demonstrated (Laschinger & Finegan, 2005; Portoghese et al., 2014). A medium effect size was chosen as it allowed for a larger number of participants which would potentially decrease the amount of bias and error. The adequate sample size for this study was calculated utilizing G*Power (Faul, Erdfelder, Buchner, & Lang, 2009; see Appendix A). I selected a standard power level of

.80 and a conventional standard of .05 for committing a Type 1 error as a level of significance for this study (Field, 2013; Warner, 2013). I conducted Pearson's r and Spearman rho correlations, and multiple regression analyses. Therefore, a sample size of 84 participants was required (Faul et al., 2009). According to Warner (2013), Pearson's r analyses should be based on large sample sizes and recommends a minimum of 100 participants. Therefore, this study aimed for 100 participants.

Procedures for Recruitment, Participation, and Data Collection

Recruitment. I recruited participants for the study by first introducing the study to the executive directors of all the CHCs and FHTs in Ontario. An online link provided access to a brief explanation of the study, the inform consent, and the survey (which included demographic data). This link was embedded in an email and forwarded by the executive directors to all eligible participants in each location. Demographic data included: gender, age, employment status, years of service at present agency (FHT or CHC), overall years of experience, professional status, level of education, and type of education (collaborative or traditional) received (Appendix D).

Consent. I distributed the survey along with the IRB approved consent form. A cooperation agreement was not required to be obtained from the CEOs at each location utilized in this study. The consent form contained my contact information, identified that this study was being conducted to complete the dissertation requirement for Walden University, described how the participants were selected, and included the purpose of the study. I provided reassurance that anonymity and confidentiality was guaranteed as I did not collect names in the survey.

Data collection. I collected data from the participants who completed the online survey. The survey was accessed by the embedded hyperlink or by direct entry of a URL. Subsequently, I entered the data into IBM SPSS Statistical software (SPSS 24) and saved it on my personal home computer which was and is password protected. Steps were taken to ensure confidentiality both online and on my personal computer. SurveyMonkey was the platform that was used and provided world-class physical and network security. SurveyMonkey follows guidelines that ensure controls at a service organization level relevant to security, availability, processing integrity confidentiality, or privacy. My personal computer requires an account name and password to activate also ensuring confidentiality. Once the survey was completed and submitted the participant was no longer enrolled in the study.

Instrumentation and Operationalization of Constructs

I administered two measures via the Internet in this study: The AITCS-II developed by Orchard et al. (2017; Appendix B) and a modified version of the esteem subscale of ERIQ developed by Siegrist (1996; Appendix C). Demographic data was obtained utilizing the format of the AITCS-II. Permission was obtained from the authors of these instruments to use these scales and to modify demographic information as required for this dissertation study (Appendix D).

AITCS. Orchard et al. initially published the AITCS in 2012, with the revised AICTS-II published in 2017. The original scale consisted of 47 items across four subscales; however initial psychometric testing reduced this scale to 37 items and three subscales (Orchard et al., 2012). The scale was developed to measure collaboration

within teams and included clients as members (Orchard et al., 2012). The instrument contains three subscales: measured partnership/shared decision-making (19 items), cooperation (11 items), and coordination (7 items). The psychometric properties of the original scale demonstrated an overall reliability of 0.98 (Orchard et al., 2012). The AITCS-II was developed as a refinement to the original scale (to determine if items within each subscale could be reduced) and is recommended for assessing collaboration in healthcare teams in practice settings (Orchard et al., 2018). This scale now consists of 23 items each ranked on a 5-point Likert scale from 1-never to 5-always and has retained acceptable levels of reliability (Cronbach alpha coefficient is 0.89) and construct validity (through exploratory and confirmatory factor analysis) within the same three subscales mentioned above (Orchard et al., 2018). Researchers have utilized the original instrument in various countries and with a wide range of practice settings (Chon, 2013; Iddins et al., 2015; Treadwell, Binder, Symes, & Krepper, 2015).

The AITCS-II scale was an appropriate instrument to utilize in this study to measure collaboration among interprofessional team members. For this study, I operationalized collaboration by calculating the total mean, standard deviation, and sum for the collaboration scale by summing all three subscales together (Orchard et al., 2018). A score of 4.0 or more was considered good collaboration, 3.0-3.9 was moving towards good collaboration, and less than 3.0 suggested a need to focus on developing a more collaborative practice (Orchard et al., 2018).

ERIQ. The ERIQ was developed to measure or operationalize the constructs of the theoretical model of effort-reward imbalance (Siegrist, 1996). The original

standardized self-report measure contained 23 Likert-scale items within three subscales: effort (6 items), reward (11 items) and over-commitment (6 items; Siegrist, 2012). This scale was further revised to include only 16 items rated on a 4-point Likert scale. Items within the subscales of effort and reward are of interest to this study (Seigrist, Li, & Montano, 2014). Siegrist et al. (2014) report an overall scale reliability of Cronbach's alpha of greater than .70. The factorial structure for the esteem components had reliability scores of .83 and .90 (Seigrist et al., 2014). Validity has been demonstrated in several studies (Li et al., 2012; Leineweber et al., 2010).

Perceived respect among health care professionals working in FHTs and CHCs in Ontario was measured or operationalized by using a modified version of the ERIQ. DeCicco et al. (2006) reported an alpha reliability of .86 on the modified scale. Faulkner and Laschinger (2008) also utilized the modified scale and reported a Cronbach's alpha score of .77. Respondents rated their perceived respect from their superior or a respective relevant person and overall respect within the workplace on a 4-point Likert scale (Appendix C). Overall respect scores are achieved by summing and averaging the two items. Higher degrees of respect were represented by higher total scores (1-4 range).

Data Analysis Plan

For this study, I used SurveyMonkey software to collect data. I loaded the data directly into IBM SPSS Statistical software (SPSS 24). Support from SurveyMonkey to facilitate this download was available in the help menu. Specific quantitative analyses were conducted to answer the following research question.

Research Question 1: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario?

$H_0$1: There is no relationship between mutual respect as measured by the modified esteem subscale of the Effort-Reward Imbalance Questionnaire (ERIQ; Siegrist, 1996) and collaboration as measured by the Assessment of Interprofessional Team Collaboration Scale II (AITCS-II; Orchard, Pederson, Read, & Laschinger, 2018; Orchard, King, Khalili, & Bezzina, 2012) among interprofessional team members working in CHCs and FHTs throughout Ontario.

H_a1: There is a relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario.

Research Question 2: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics?

$H_0$2: There is no relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

H_a2: There is a relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

I provided descriptive statistics for the demographic variables (Appendix D) obtained and reported this information in a table format in Chapter 4. Descriptive statistics provided information on the means, standard deviations, and range of scores for each of the variables. Data was screened for errors in data coding and entry, inconsistent responses or missing data, outliers, nonnormal distribution, nonlinear relationships, and size of sample groups to ensure groups are large enough for the intended analyses (Warner, 2013). This analysis allowed for a description of the population including which professions and practice areas were represented.

Total scores on the AICTCS-II were analyzed and correlated with total scores on the modified esteem subscale of the ERIQ. Scale scores were tested to determine if the variables demonstrate a linear relationship. Pearson's r and Spearman's rho correlation analyses were computed on AICTCS-II scores with modified esteem subscale score to assess for a relationship. I selected the conventional standard of .05 for committing a Type 1 error for this study (Warner, 2013). I chose the confidence intervals to be 95% (Warner, 2013). Correlation analyses were conducted using an appropriate statistical computer program (SPSS 24) and I displayed the results in chart form for ease of interpretation. Multiple regression analyses were conducted to determine if there was any

relationship between the independent variable mutual respect and the dependent variable interprofessional collaboration while controlling for the demographic or predictor variables (Field, 2013).

Threats to Validity

External Validity

External validity threats arise when incorrect generalizations are made from the data and applied to other populations, setting, or situations (Creswell, 2009). I conducted this study using healthcare professionals working in CHCs and FHTs throughout Ontario, Canada. Therefore, data collected from the survey cannot be generalized to groups outside of these settings. For instance, healthcare professionals working in hospitals, long-term care homes, or private clinics may possess different characteristics than the studied group.

Internal Validity

Internal validity was not relevant in this proposed study as this research followed the methodology of a descriptive, correlational design. Internal validity is relevant in studies that try to establish a causal relationship (Trochim, 2006). However, a threat to internal validity can occur with the selection of study participants and instruments used. Efforts were made to obtain an unbiased sample. Procurement of an adequate sample size also helped to reduce the threat to the internal validity of this study. The survey was available for a short period, approximately six weeks. This short time frame helped limit the potential for a maturation effect (Laerd, 2013). However, maturation effects can still occur during this short term. For instance, people's moods can change. They can go from

being happy to angry. Factors such as participant fatigue, boredom, hunger and inattention can also occur. These factors are difficult to control and can reduce the internal validity of a study (Laerd, 2013). Data collection at only one point in time can improve testing validity. In this study, participants chose when to complete the survey, hopefully, choosing a time when they were well rested and had limited or no distractions.

Subject effects are another threat to internal validity. This study used a self-administered questionnaire. Participants may have answered the survey questions in the way they felt the researcher was expecting and not in an honest manner. Ensuring anonymity may have helped alleviate the potential for false responses. Response bias can also affect the internal validity of this study (Creswell, 2009). I performed statistical analyses as described above only after I explored the data and ensured that the assumptions necessary for conducting Pearson's r and multiple regression analyses had been met.

Construct Validity

I previously discussed the reliability and validity of the instruments that were used to collect the data under instrumentation and operationalization of constructs. Utilizing an adequate power and sample size assisted in maintaining construct validity. Histograms and scatterplots were utilized to demonstrate that assumptions of linear relationships had been met (Field, 2013). I undertook appropriate measures if the data violated any assumptions. This violation involved the identification and removal of outliers and the identification of possible extraneous variables (Warner, 2013).

Ethical Procedures

Identifying potential ethical issues is an important component of any research plan. The study proposal was submitted and approved by Walden University's IRB before any data was collected (Walden IRB approval number 03-22-18-0610984). This step ensured the protection of human participants and helped to identify any potential ethical issues that were present. All recruitment material was IRB approved and carefully phrased to avoid any ambiguous language. I was not required to obtain a cooperation agreement from each location utilized in this study.

The main ethical concerns for this study included informed consent, data collection, and data storage. This research carried a very low risk for participants. Partaking in this study was voluntary, anonymous, and involved professional adults over the age of 18 years. Ensuring informed consent and confidentiality was imperative. I obtained consent from participants by having them read the consent form, and that completion of the online survey implied consent. I did not collect names of participants. Identification was by the last four digits of their employee number only if the participant chose to respond to this question. I ensured responses to the survey were sent directly to SurveyMonkey, and the respondents' emails were not to be attached thereby providing anonymity. Participants who elected not to participate or withdraw from this study did not suffer any adverse consequences.

I maintained confidentiality by utilizing a secure web-based platform, and a password-protected personal computer. SurveyMonkey ensures secure storage and back up of data. Stored data did not contain any identifying details. Participants were made

aware of the fact that I would be sharing cleaned data (which does not contain any identifying information) with the developers of the AICTCS-II instrument utilized in this study. After the study, data will be kept secure for a minimum of five years. I also ensured an accurate analysis of the data in the results section of this dissertation and in the appropriate dissemination of the findings.

Summary

This study used a quantitative approach to explore the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario. A correlational, descriptive study design was used. I sent surveys via an online link to the CHCs and FHTs in Ontario. Mutual respect was measured utilizing three questions from the ERIQ developed by Siegrist (1996). Collaboration was measured utilizing the AITCS-II developed by Orchard et al. (2018). Data from the completion of the survey was collected via SurveyMonkey and transferred to SPSS 24 for analysis. Ethical issues and risks were minimal for this study, and I obtained IRB approval before data collection. I have provided a comprehensive review of the study's data collection and explained results in more detail in Chapter 4.

Chapter 4: Results

Introduction

The purpose of my study was to explore the relationship between perceptions of collaboration and mutual respect among members of interprofessional teams from FHTs and CHCs throughout Ontario. The research questions were as follows:

Research Question 1: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario?

Research Question 2: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics?

The best method to utilize to answer the research questions was a correlational, descriptive, quantitative research design (Creswell, 2009; Grove, Burns, & Gray, 2013). A survey approach (questionnaire) was used to obtain quantitative data. The variable, mutual respect, was measured utilizing questions from the modified esteem scale of the ERIQ developed by Siegrist (1996). The variable, collaboration, was measured utilizing the AITCS-II (Orchard et al., 2012; Orchard et al., 2018). The null hypotheses were that there would be no relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario both independently and after controlling for the demographic variables. The alternative hypotheses were that there would be a relationship between mutual respect and collaboration in both scenarios. Pearson's r and Spearman's rho correlations were

conducted on the total data set ($N = 99$) and very similar results were found between these two correlations (Pearson $r = .49$, $p < .01$; Spearman $r = .47$, $p < .01$). However, due to smaller subsample sizes and the potential for violation of Pearson's r assumptions, the ordinal nature of the data, and to keep consistency between interpretation of results, Spearman's rho correlations were used instead of Pearson correlations (Warner, 2013).

I have included in this chapter the frequency counts and descriptive statistics of the sample which were comprised of the various demographic characteristics of the respondents as well as the means and standard deviations of the data as generated by the demographic characteristics and the psychometric characteristics for summated scale scores (survey tools). The correlations between mutual respect and collaboration are presented to answer the first research question and multiple regression analyses are included to answer the second research question. Results of additional findings that extended beyond the primary research questions are included in this chapter.

Data Collection

For this study, I utilized healthcare professionals working in CHCs and FHTs throughout Ontario. I gained access to this population through the MOHLTC list serve. This government-based website provided contact numbers and hyperlinks for all the FHTs and CHCs that were presently functioning in Ontario. I selected professionals through convenience sampling from an approximate total of 184 FHTs and 87 CHCs in Ontario. Purposive sampling occurred as I attempted to contact every available CHC and FHT in Ontario.

Recruitment

The list of FHTs and CHCs in Ontario was randomly ordered by region and approached by telephone or email. After three failed attempts to reach the FHT or CHC manager or executive director to discuss the study, I moved on to the next FHT or CHC in the list. I requested permission to survey potential participants from the manager or executive director. I received confirmed contact and agreement to participate from a total of 34 agencies (13% response). Six agencies declined involvement due to research fatigue (2%). However, the survey link was still sent three times at two-week intervals to a total of 174 agency weblinks (64%) and was also submitted twice to the Association of Family Health Teams of Ontario and Association of Ontario Health Centers' weekly newsletters. I sent the first survey out on March 27, 2018 and the survey was closed on May 9, 2018, allowing for a total of 6 weeks for data collection. It is difficult to ascertain the exact size of the population surveyed as each agency employs different numbers and different types of healthcare professionals. It is also difficult to ascertain population size as the survey may or may not have been forwarded by the CEO's to all healthcare professionals or accessed by the healthcare professionals through the agency weblinks or newsletters.

Descriptive and Demographic Characteristics

On average, each FHT or CHC employs 20 healthcare professionals. If all 174 agencies contacted had 20 health care professionals, the projected response rate would be 3,480 participants. A total of 162 potential respondents initiated the survey which is a less than one percent response rate. After screening the data for inclusion/exclusion criteria,

incomplete responses, and outliers, a total of 99 participants were included in the final analyses.

Table 1 displays the frequency counts for selected variables. The sample included almost equal numbers of participants from FHTs (47.5%) and CHCs (52.5%). The participants were mainly female (88.9%), full-time employees (79.8%), with a traditional education experience (81.1%). Over half of the participants (53.5%) had a master's degree, and 43.4 % were nurses (Table 1).

Table 1

Frequency Counts for Selected Demographic Variables (N = 99)

Variable	Category	*N*	%
Gender			
	Male	11	11.1
	Female	88	88.9
Employment Status			
	Full Time	79	79.8
	Part Time	20	20.2
Level of Education			
	Bachelor's Degree	25	25.3
	Diploma	21	21.2
	Master's Degree	53	53.5
Place of Employment	FHT	47	47.5
	CHC	52	52.5
Nursing			
	No	56	56.6
	Yes	43	43.4
Type of Education	Traditional	81	81.1
	Collaborative	13	31.1
	Both	5	5.1

Table 2 displays the frequency counts for the disciplines represented in the survey sorted by highest frequency. The most common disciplines for the respondents were nurse practitioners (NPs) and registered nurses (RNs) each accounting for 18.2 %. Social workers at 13.1 %, and dieticians (Nutritionist) at 11.1 % made up the next most frequent disciplines responding to the survey. Although physicians represent most employees within FHTs and CHCs, they were underrepresented in this sample accounting for only 9.1% of participants (Table 2).

Table 2

Frequency Counts for Discipline Sorted by Highest Frequency (*N* = 99)

Discipline	*N*	%
Nurse Practitioner	18	18.2
Registered Nurse	18	18.2
Other	15	15.2
Social Worker	13	13.1
Dietician (Nutritionist)	11	11.1
Physician	9	9.1
Registered Practical Nurse	8	8.1
Clinical Kinesiologist	5	5.1
Physical Therapist	3	3.0
Pharmacist	2	2.0
Respiratory Therapist	2	2.0
Occupational Therapist	2	2.0
Clinical Psychologist	1	1.0
Dental Assistant	1	1.0

Table 3 displays descriptive statistics for selected demographic variables. These included years in age (M = 43.06), years in practice (M = 15.40), and years with current employer (M = 5.90; Table 3).

Table 3

Descriptive Statistics for Selected Demographic Variables (*N* = 99)

Variable	*M*	*SD*	Minimum	Maximum
Age in Years	43.06	10.35	24.00	64.00
Years in Practice	15.40	10.79	0.50	39.00
Years with Current Employer	5.90	5.00	0.00	29.00

Results

Table 4 displays the psychometric characteristics for the five summated scales scores. This tables includes the four sub scores and total score for the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) which was used to measure collaboration, and the modified esteem subscale of the ERIQ (Siegrist, 1996) which was used to measure mutual respect. All scales demonstrated Cronbach's alphas greater than 0.70 which suggests that all scales had acceptable levels of internal consistency reliability (Warner, 2013). The mean score for collaboration (*M* = 4.02) suggested good collaboration and the mean score for mutual respect (*M* = 3.38) suggested moderate to high degrees of respect (Table 4).

Table 4

Psychometric Characteristics for Summated Scale Scores (*N* = 99)

Score	Number of Items	*M*	*SD*	Minimum	Maximum	Alpha
Partnership Scale	8	4.15	0.47	3.00	5.00	.81
Cooperation Scale	8	4.17	0.46	3.00	5.00	.89

Coordination Scale	7	3.71	0.60	2.43	5.00	.77
Total Score Scale	23	4.02	0.43	3.04	5.00	.91
Mutual Respect Scale	2	3.38	0.64	1.50	4.00	.89

Tests of Assumptions

Before answering the research question, several statistical methods were used to test the statistical assumptions. These tests included identifying possible univariate and multivariate outliers, normality, linearity between the independent variables and the dependent variable, independence of observations, multicollinearity, independence of residuals, and homoscedasticity (Warner, 2013).

Outliers. To measure the presence of univariate outliers, I examined boxplots. Four rounds of boxplots reduced the sample from $N = 118$ to $N = 101$. To measure the possible presence of multivariate outliers, the Mahalanobis distance statistics were calculated. Two multivariate outliers were found. This reduced the final sample to $N = 99$. This assumption was now met.

Normality. To address normality for the collaboration and mutual respect scores, frequency histograms and Q-Q plots were created. Acceptable levels of normality were found.

Linearity. To examine the extent of linearity between the independent variables and the dependent variable, I examined bivariate scatterplots. After inspection of the scatterplots for linear relationships between all the collaboration scores and mutual respect, I found this assumption was met.

Independence of Observations. The independence of observations assumption

was met in two ways. First, the design of the study had nurses only complete the survey once, so there were no repeated measurements of the same person. Also, the Durban Watson statistic was acceptable.

Multicollinearity. I addressed multicollinearity by examination of the Variance Inflation Factor (VIF) statistics in the regression model. All values were acceptable, so this assumption was met.

Independence of residuals. The assumption of independence of residuals was measured two ways: the normal probability P-P plot of the regression standardized residuals and the frequency histogram of the standardized residuals approximated a normal curve with none of the standardized residuals having a *z* score of ± 3.00. Taken together, this assumption was met.

Homoscedasticity. The assumption of homoscedasticity was addressed with the scatterplot of the standardized residuals with the standardized predicted values. This assumption was adequately met.

Summary of statistical assumptions. In summary, the statistical assumptions pertaining to outliers, normality, linearity, independence of observations, the absence of multicollinearity, independence of residuals and homoscedasticity were all adequately met (Warner, 2013).

Answering the Research Questions

Research Question 1: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario?

H_o1: There is no significant relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario.

H_a1: There is a significant relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario.

To answer this research question, I conducted a Spearman's rho correlation analysis on the total score for the AITCS-II scale and the total score for the modified esteem subscale of the ERIQ. Spearman's rho correlations were used instead of Pearson's r correlations due to the smaller sample sizes in the sub samples, the ordinal nature of the data, and the potential of violating assumptions (Warner, 2013). A significant positive correlation, $r_s = .47$, $p < .001$, was discovered (see total scores in Table 6 or Table 7 found under additional analyses). Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that there was a significant relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario.

Research Question 2: What is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics?

*Ho*2: There is no significant relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

H_a2: There is a significant relationship between mutual respect as measured by the modified esteem subscale of the ERIQ (Siegrist, 1996) and collaboration as measured by the AITCS-II (Orchard et al., 2012; Orchard et al., 2018) among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics.

To answer this question, Table 5 displays the multiple regression model predicting mutual respect based on the total collaboration score controlling for eight demographic variables. The overall model was significant (p = .001) and accounted for 32.0% of the variance in mutual respect. Inspection of the table found mutual respect to be higher when the nurse had higher levels of education (β = .21, p = .02) and higher levels of collaboration (β = .47, p = .001). Of note, level of education was the only significant demographic characteristic that contributed to the relationship between mutual respect and collaboration. This combination of findings provided support to reject the null hypothesis and accept the alternative hypothesis that a significant relationship existed between mutual respect and collaboration after controlling for demographic variables (Table 5).

Table 5

Multiple Regression Model Predicting Mutual Respect Based on Total Collaboration Controlling for Demographics (N = 99)

Variable	*B*	*SE*	*β*	*t*	*p*
Intercept	0.27	0.93		0.29	.77
Gender [a]	0.07	0.19	.03	0.36	.72
Age in years	0.00	0.01	.05	0.37	.71
Employment Status [b]	-0.17	0.15	-.10	-1.09	.28
Level of Education	0.16	0.07	.21	2.34	.02
Years of Practice	0.00	0.01	-.07	-0.51	.61
Years with current team	-0.02	0.01	-.19	-1.81	.07
Place of Employment [c]	-0.02	0.12	-.01	-0.16	.88
Nursing Discipline [d]	-0.20	0.12	-.16	-1.65	.10
Total Collaboration Score	0.07	0.14	.47	4.96	.001

Note. F (9, 89) = 4.65, p = .001. R^2 = .320. Durbin-Watson = 2.29.

[a] Gender: 1 = *Male* 2 = *Female*.

[b] Employment Status: 1 = *Full Time* 2 = *Part Time.*

[c] Place of Employment: 1 = *Family Health Team* (FHT) 2 = *Community Health Center* (CHC)

[d] Nursing Discipline: 0 = *No* 1 = *Yes*.

Additional Analyses

Further Spearman's rho correlations analyses were conducted to determine relationships between collaboration and mutual respect based on the type of employment as displayed in Table 6. When examining the total relationship between mutual respect and the four collaboration scores, the largest coefficient occurred between mutual respect and cooperation (r_s = .53, p < .001) and the smallest coefficient was between mutual respect and coordination (r_s = .31, p < .001). The Spearman's rho correlations between mutual respect and the four collaboration scores were higher in the FHT group compared to the CHC group. The largest difference among the coefficients occurred between

mutual respect and the partnership score of the collaboration scale with the FHT subsample obtaining $r_s = .58$, $p < .001$ and the CHC subsample being non significant with $r_s = .18$ (Table 6).

Table 6

Spearman Correlations for Collaborative Scales with Mutual Respect Scores Based on Type of Employment ($N = 99$)

	Mutual Respect Scale		
Collaboration Scale	Total ($N = 99$)	FHT ($n = 47$)	CHC ($n = 52$)
Partnership Scale	.38****	.58****	.18
Cooperation Scale	.53****	.67****	.40***
Coordination Scale	.31***	.34*	.28*
Total Scale	.47****	.60****	.32**

* $p < .05$, ** $p < .01$, *** $p < .005$, and **** $p < .001$ (2-tailed)

Table 7 displays further Spearman's rho correlations that were conducted to examine the relationship between collaboration and mutual respect based on type of discipline. Comparing the sub groups of non-nurses and nurses, similar relationships were found between cooperation. Higher relationships were found for partnership with the non-nurses ($r_s = .47$, $p < .001$) compared to nurses ($r_s = .24$). A stronger relationship was found regarding coordination with nurses ($r_s = 40$, $p < .01$) compared to non-nurses ($r_s = .26$, $p < .05$; Table 7).

Table 7

Spearman Correlations for Collaborative Scales with Mutual Respect Scores Based on Type of Discipline ($N = 99$)

	Mutual Respect Scale		
Collaboration Scale	Total ($N = 99$)	Non nurses ($n = 56$)	Nurses ($n = 43$)
Partnership Scale	.38****	.47****	.24
Cooperation Scale	.53****	.52****	.53****
Coordination Scale	.31***	.26*	.40**
Total Scale Score	.47****	.45****	.53****

* $p < .05$, ** $p < .01$, *** $p < .005$, and **** $p < .001$ (2-tailed)

Summary

A sample of 99 healthcare professionals currently practicing in FHTs and CHCs in Ontario participated in an online, descriptive, correlational study to explore the relationship between collaboration and mutual respect. Descriptive statistics were provided to portray the characteristics of the sample. The sample was made up of mostly females, full-time employees, having a master's education, and receiving a traditional (discipline specific) style education.

Spearman's rho correlations were used to answer the research question what is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario? The data supported the rejection of the null hypothesis by demonstrating a strong positive relationship between mutual respect and collaboration (Table 6).

Multiple regression analysis was conducted to answer research question what is the relationship between mutual respect and collaboration among interprofessional team members working in CHCs and FHTs throughout Ontario after controlling for the respondents' demographic characteristics? The data demonstrated a significant relationship (p = .001) and accounted for 32.0% of the variance in mutual respect. The null hypothesis was again rejected (Table 5).

Further analysis was conducted to determine Spearman's rho correlations between mutual respect and collaboration based on agency and discipline. Scores were higher in the FHT group compared to the CHC group. Nurses had higher scores between mutual respect and coordination, whereas non nurses had higher scores between partnership and mutual respect (Table 6 and Table 7).

In the final chapter, these findings will be compared to the literature and analyzed based on the structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008). The final chapter also includes conclusions and implications drawn from the data and the study's potential impact on positive social change. In the final chapter, I provided a series of recommendations for further research and practice.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to explore the relationship between perceptions of collaboration and mutual respect among members of interprofessional teams from FHTs and CHCs throughout Ontario. A quantitative, descriptive research design was used to analyze this issue. An assessment of the perceived relationship between collaboration and mutual respect can aid in the development of interventions to improve interprofessional practice. This research was just one step taken to increase understanding by filling a gap in the literature regarding mutual respect and collaboration in interprofessional team environments. In this chapter, I will compare what I found in my study to the literature, draw conclusions and implications, and make recommendations.

Key findings of my study include demographic, collaboration, and mutual respect factors. The sample was small in comparison to the potential number of professionals working within all the FHTs and CHCs throughout Ontario. Most participants had been with their present employer an average of five years, were female, and at least half had a master level of education. The sample was divided into two almost equal groups: nurses and non-nurses. However, although physicians represent most employees within FHTs and CHCs, they were underrepresented in this sample and some professions had no representation.

The mean score for collaboration suggested good collaboration and the mean score for mutual respect suggested moderate to high degrees of respect. A significant positive correlation was discovered between mutual respect and collaboration among

interprofessional team members working in CHCs and FHTs throughout Ontario. There remained a significant positive relationship between mutual respect and collaboration after controlling for the demographic variables. Mutual respect scored higher when the nurse had higher levels of education and higher levels of collaboration. Correlation scores were higher in the FHT group compared to the CHC group. Regarding discipline, nurses had higher scores between mutual respect and coordination, whereas non nurses had higher scores between partnership and mutual respect. Total collaboration scores and scores between cooperation and mutual respect were similar between the disciplines.

Interpretation of the Findings

Studying the relationship between collaboration and respect is complex for many reasons. Clancy et al. (2012), D'Amour et al. (2005), and McInnes et al. (2015) reiterated the fact that collaboration is a complex phenomenon which can be interpreted differently by various professionals. IPC is complex because it is difficult to determine and then measure the elements necessary for collaborative practice. Many researchers have also used various conceptual models (or frameworks) and measurement tools in the study of interprofessional practice thus decreasing the ability to generalize or assimilate results (D'Amour et al., 2008; Gaboury et al., 2009; Hepp et al., 2015; Légaré et al., 2010; Mulvale et al., 2016). My study evaluated the correlation between perceived respect and collaboration among the various healthcare professionals working in FHTs and CHCs in Ontario. The data obtained provided insight into differences in perceptions based on agency and discipline. The data was also analyzed using the theoretical lens of the

structuration model of collaboration developed by D'Amour (as described in D'Amour et al., 2008).

Interprofessional Collaboration and Respect in FHTs and CHCs

The results revealed a significant correlation between mutual respect and collaboration among interprofessional team members working in FHTs and CHCs throughout Ontario. This finding was consistent with Gocan et al.'s (2014) review of the literature. Gocan et al. (2014) discovered that while team collaboration was occurring in FHTs, it has not reached its full potential. However, although I did not utilize the same instrument as Sicotte et al. (2002), my results do demonstrate a slight improvement in interprofessional collaboration. Sicotte et al. (2002) discovered very modest achievement (3.5 out of 5) of interdisciplinary collaboration. My study suggested good collaboration (4.02 out of a total score of 5), but there is still room for improvement.

The FHTs had almost three times higher correlation scores compared to CHCs. This finding suggests that interprofessional team members at CHCs feel less respected and collaborate less. However, Rayner and Muldoon's (2017) quantitative study that examined the perceptions of team functioning from various staff members working in CHCs in Ontario found overall there was a positive perception of organizational justice (which measured perceptions of fairness, equity, and respect). The differences in scores may also be related to funding models. Physicians at CHCs are reimbursed by salary whereas physicians working in FHTs are paid by a "blended funding formula based on capitation with additional financial incentives" (Rosser et al., 2011, p. 166). More

research is required to determine if differences in funding models affect perceptions of respect and collaboration.

Demographic Variables

There was a significant relationship between level of education and the correlation between mutual respect and collaboration. Brown et al. (2015) supported this correlation to education level in their study which examined the relationship between nurses' professional values (such as trust, professionalism, and caring) and their attitudes towards nurse-physician collaboration at a tertiary hospital in the United States. The positive relationship was influenced by previous IPE experience and with having a master's or higher level of nursing education (Brown et al., 2015).

Schadewaldt et al. (2013) reported that education and practice settings have changed in recent years and medical practitioners presently have more experience working with (or collaboration with) a variety of social and health care professionals than 20 years ago. This statement suggests that interprofessional collaboration should be positively related to years of service. In my study, the average years of employment were 15 with an average of 6 years with the current employer. This statistic demonstrates that most professionals were trained in the last 20 years. However, neither years of experience or years with the present employer was statistically significant in predicting mutual respect based on the total collaboration score.

Nurses had higher scores between mutual respect and coordination, non nurses had higher scores between partnership and mutual respect, and similar scores were found between cooperation and the total score. Variations between disciplines and collaboration

were also discovered by Sollami et al. (2015). In their meta-analysis to investigate the differences in IPC ratings between nurses and physicians, physicians perceived more collaborative interactions compared to nurses, but nurses had more positive attitudes towards IPC (Sollami et al., 2015).

Most of the literature reviewed in Chapter 2 was qualitative. My study added a quantitative component. The addition of qualitative research would be required to draw comparisons between the results of my study with the themes identified in the literature. However, commonalities include respect (trust), communication, coordination, level of education, and the varying interpretations and perceptions of interprofessional collaboration in actual practice (Al Sayah et al., 2014; Brown et al., 2015; McInnes et al., 2015). Further research is required to derive a better understanding of the dynamics of collaborating teams and the processes involved.

Theoretical Findings

My study utilized the structuration model of collaboration developed by D'Amour and Oandasan (as described in D'Amour et al., 2008) to guide the interpretation of the results. The interactional component of the model was important because one of the prime objectives of collaborative practice is sharing common goals, a common vision, and developing a sense of belonging. Team members need to develop strong bonds and work together respectfully and in a trustworthy manner to achieve a cohesive focus (D'Amour & Oandasan, 2005). The main dimension of focus for my study was the internalization factor. Internalization, as suggested by D'Amour et al. (2008), involves professionals being aware of and managing their interdependencies and acting with

interprofessionality. Interprofessionality is defined as a cohesive practice between professionals from different disciplines.

The results of my study support D'Amour's structuration model of collaboration. The positive correlation between mutual respect and collaboration coincide with the concept of interprofessionality. In FHTs and CHCs in Ontario, professionals from different disciplines can work together in a respectful, unified manner. The balance between collaboration and autonomy is another core component of the internalization factor for this model. Although more information would be required to draw an accurate conclusion, the variations in scores between disciplines (nurses and non nurses) may be explained by examining the relationship between collaboration and autonomy. The multiple regression model utilized in my study, predicting mutual respect based on the total collaboration score controlling for eight demographic variables, accounted for 32.0% of the variance in mutual respect. This result validates the fact that many other variables need to be considered when examining interprofessional collaboration. D'Amour's model consists of four dimensions of collaboration and ten indicators associated with these dimensions. However, only one dimension was explored in the analysis of this research.

Limitations of the Study

The results of this study are limited for several reasons. First, my study utilized participants only from FHTs and CHCs throughout Ontario. In the Northern part of Ontario, the official language is French. The study was restricted to those participants that could read and understand English. This restriction excluded the inclusion of some

FHTs and CHCs in the province. It is unknown if the inclusion of this population would alter the results obtained. Second, the sample size was small and consisted of mostly females, full time employees, and professionals with a master's level of education. An accurate potential response rate was difficult to ascertain, but I estimated a less than one percent response rate. This low response rate has a potential to bias the results. However, despite the low response, significant relationships between the study variables were found. Third, many disciplines were underrepresented or not represented at all. These combined factors will limit the generalizability of this study to other populations with similar attributes.

This research is also limited due to the self-reporting nature of the data. Participants who responded to the survey may be more receptive to collaboration, feel more respected, and work in exemplary interprofessional teams or they may be disgruntled employees. Either of these scenarios may not be an accurate representation of the general population.

Recommendations

The nature of this study lends itself towards replication. This replication could include the same population with intentions of attracting more healthcare professional to participate. Visiting each agency to promote the study personally as well as providing an incentive may increase response rates. My study was like other studies in that low response rates from various disciplines were obtained causing me to combine the responses into only two groups (nurses and non nurses). Future studies should again attempt to obtain an equal number of responses from multiple disciplines so more robust

analyses between groups can be conducted. Translation and reliability testing of the measurement tools into the French language would allow all FHTs and CHCs in Ontario the opportunity to contribute. This study could also be replicated in other interprofessional practice settings and in other regions to promote generalization of the results to a larger population. Repeat studies utilizing the same measurement tools also allows for more generalizability of results.

I would also recommend adding a qualitative component to this study. Qualitative data would allow the professional to elaborate on why a certain score was chosen and to provide examples of how respect and collaboration are demonstrated in practice. Another recommendation to expand this study would be to develop and test an intervention directed at improving mutual respect with pre and posttest measure of interprofessional collaboration or improving collaboration and pre and post testing mutual respect scores. Adding a longitudinal component could assist in determining if mutual respect and collaboration improve over time or if and how changes in the political environment affect interprofessional team functioning.

Future studies should focus on how the differences in organizational structure between FHTs and CHCs affect interprofessional practice such as exploring how the funding model of the agencies impact perceived respect and collaboration. The level of education was the only demographic variable that significantly influenced the correlation between mutual respect and collaboration. The literature also supported the role formal education plays in promoting interprofessional collaboration (Morris & Matthews, 2014;

Moradi et al., 2016). However, more research is required to determine the how education influences mutual respect and collaboration.

Implications

Social Change

The results of this study have the potential to affect positive social change among both individuals (professionals) and organizations. My research provided information that can lead to solutions for better practice. The results demonstrated good collaboration and moderate to high levels of respect. Advances, therefore, could be made to improve collaboration among team members as research has demonstrated that higher levels of collaboration and respect can lead to improved access to care and increase the effectiveness and quality of the care provided (Gocan et al., 2014).

Bringing the healthcare professionals together so each can do what they are qualified to do but in a more unified manner improves patient care (Newhouse & Spring, 2010). At an individual professional practice level, results of my study demonstrated that nurses had higher scores between mutual respect and coordination, whereas non nurses had higher scores between partnership and mutual respect. Therefore, individuals should be placed in positions that allow them to utilize their skills to improve collaboration.

Conclusion

Researchers have demonstrated the importance of a clearer understanding of the elements required for an effective interprofessional collaborative practice (Swihart, 2016). The purpose of my study was to focus on one component, mutual respect, and determine its relationship to collaboration among various healthcare professionals

working in FHTs and CHCs across Ontario. The review of the literature supported this purpose by demonstrating linkages between collaboration, mutual respect, and interprofessional teams.

This study helped fill a gap in the literature by determining that there was a relationship between mutual respect and collaboration among members of interprofessional teams working in CHCs and FHTs throughout Ontario. From a policy perspective, this study assisted in the evaluation of collaboration and respect in these unique practice settings. This research provided data on how well collaboration is progressing, how respected professionals felt, detected a significant positive relationship between collaboration and perceived respect, and assisted in the identification of areas that may be influential in making improvements. From a methodological perspective, the knowledge base was expanded by utilizing a quantitative correlational approach, an existing theory, and reliable, validated instruments. The knowledge obtained can influence practice, education, and guide future research.

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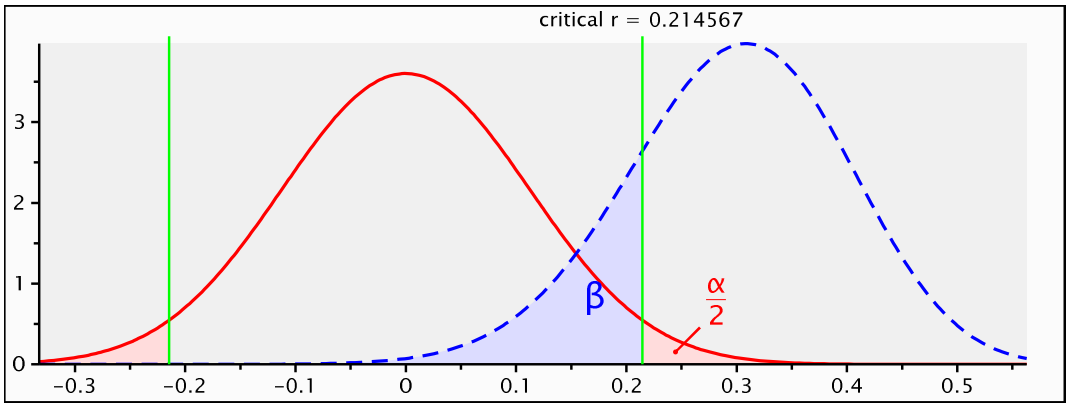
Appendix A: Power Analysis



[5] *-- Friday, September 08, 2017 -- 10:18:19*

Exact – Correlation: Bivariate normal model

Options:	exact distribution		
Analysis:	A priori: Compute required sample size		
Input:	Tail(s)	=	Two
	Correlation ρ H1	=	0.3
	α err prob	=	0.05
	Power (1−β err prob)	=	0.8
	Correlation ρ H0	=	0
Output:	Lower critical r	=	−0.2145669
	Upper critical r	=	0.2145669
	Total sample size	=	84
	Actual power	=	0.8003390

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Appendix B: Assessment of Interprofessional Team Collaboration Scale II

(AITCS-II) © C Orchard, 2015

The AITCS is a diagnostic instrument that is designed to measure the interprofessional collaboration among team members. It consists of 23 statements considered characteristic of interprofessional collaboration (how team works and acts). Scale items represent three elements that are considered to be key to collaborative practice.

These subscales are: (1) Partnership— 8 items,

(2) Cooperation—8 items, and

(3) Coordination—7 items.

Scoring AITCS Respondents indicate their general level of agreement with items on a 5-point rating scale that ranges from 1 = "Never"; 2 = "Rarely"; 3 = "Occasionally"; 4 = "Most of the time"; to 5 = "Always". These ratings produce scores from 23 to 115. It takes approximately 10 minutes to complete.

Demographic Information

Please enter the last four digits of your employee ID number in these boxes: _ _ _ _

Please check the category you belong to:

Gender: Male: ___Female: ____ Age: ____years

Employment Status: FT:__ PT:__ Casual:__

Educational Preparation: Certificate:__, Bachelor Degree:__, Diploma:__,

Masters Degree:__ , Other (specify): _____

Please check one of the following discipline categories: Audiologist Physical Therapist (Physiotherapist) Clinical Kinesiologist Pharmacy Clinical Psychologist Paramedics Dental Assistant Physician (Medicine) Dentist Personal Support Worker Dietary Aid Speech Language Pathologist Dietitian (Nutritionist) Social Worker Imaging Technologist Spiritual/Pastoral Care Laboratory Technologist Recreational Therapist Nursing: Registered Nurse Respiratory Therapist Nursing: Practical Nurse Therapy Assistant Occupational Therapist Other (please specify) ---

Please indicate: Years in practice (since achieving license to practice):_____;

Years with your current team: _____

Assessment of Interprofessional Team Collaboration Scale Instructions: Note: Several terms are used for the person who is the recipient of health and social services. For the purpose of this assessment, the term 'patient' will be used. While acknowledging other terms such as 'client' 'consumer' and 'service user' are preferred in some disciplines/jurisdictions.

Please circle the value which best reflects how you currently feel your team and you, as a member of the team, work or act within the team.

| ---------- | ---------- | ---------- | ---------- | ----------

1	2	3	4	5
Never	Rarely	Occasionally	Most of the time	Always

Section 1: PARTNERSHIP

When we are working as a team all of my team members…..

1 include patients in setting goals for their care

1 2 3 4 5

2 listen to the wishes of their patients when determining the process of care chosen by the team

1 2 3 4 5

3. meet and discuss patient care on a regular basis

1 2 3 4 5

4. coordinate health and social services (e.g. financial, occupation, housing, connections with community, spiritual) based upon patient care needs

1 2 3 4 5

5. Use consistent communication with to discuss patient care

1 2 3 4 5

6. Are involved in goal setting for each patient

1 2 3 4 5

7. encourage each other and patients and their families to use the knowledge and skills that each of us can bring in developing plans of care

1 2 3 4 5

8. work with the patient and his/her relatives in adjusting care plans

1 2 3 4 5

*A team can be defined as any interactions between one or more health professionals on a regular basis for the purposes of providing patient care.

Section 2: COOPERATION

When we are working as a team all of my team members…..

9. share power with each other

1 2 3 4 5

10. respect and trust each other

1 2 3 4 5

11. are open and honest with each other

1 2 3 4 5

12. make changes to their team functioning based on reflective reviews

1 2 3 4 5

13. strive to achieve mutually satisfying resolution for differences of opinions

1 2 3 4 5

14. understand the boundaries of what each other can do

1 2 3 4 5

15. understand that there are shared knowledge and skills between health providers on the team

1 2 3 4 5

16. establish a sense of trust among the team members

1 2 3 4 5

Section 3: COORDINATION

When we are working as a team all of my team members…..

17. apply a unique definition of Interprofessional collaborative practice to the practice setting

1 2 3 4 5

18. equally divide agreed upon goals amongst the team

1 2 3 4 5

19. encourage and support open communication, including the patients and their relatives during team meetings

1 2 3 4 5

20. use an agreed upon process to resolve conflicts

1 2 3 4 5

21. support the leader for the team varying depending on the needs of our patients

1 2 3 4 5

22. together select the leader for our team

1 2 3 4 5

23. openly support inclusion of the patient in our team meetings

1 2 3 4 5

Revised version November 16, 2015

Thank you for completion of this questionnaire!

Appendix C: Effort-Reward Imbalance Questionnaire Modified Esteem Subscale

Strongly disagree----------Disagree----------Agree----------Strongly Agree

1 2 3 4

*ERI4- I receive the respect I deserve from my superior or a respective relevant person

1 2 3 4

ERI8- Considering all my efforts and achievements, I receive the respect and prestige I deserve at work.

1 2 3 4

*ERI4 was previously 2 questions ERI7 “I receive the respect I deserve from my superiors” and ERI8 “I receive the respect I deserve from my colleagues” (Siegrist, Li, & Montano, 2014).

Appendix D: Demographic Information

Please enter the last four digits of your employee ID number in these boxes: _ _ _ _

Please check the category you belong to:

Gender: Male: ___Female: ____ Other:_____

Age: ____years

Employment Status: FT:__ PT:__ Casual:__

Place of Employment: Community Health Center (CHC): ___, Family Health Team (FHT): ___

Local Health Integration Network (LIHN): Erie-St.Clair:___, South West:___, Waterloo Wellington:___, Hamilton Niagara Haldimand Brant:___, Central West:____, Mississauga Halton:___, Toronto Central:___, Central:___, Central East:___, South East:___, Champlain:__,

North Simcoe Muskoka:___, North East:___, North West:____

Educational Preparation: Certificate:__, Bachelor Degree:__, Diploma:__, Masters Degree:__ Other (specify): _____

Type of Educational Experience: Traditional (discipline specific) ____

Collaborative:_____

Please check one of the following discipline categories:

Audiologist Physical Therapist (Physiotherapist) Clinical Kinesiologist Pharmacy Clinical Psychologist Paramedics Dental Assistant Physician (Medicine) Dentist Personal Support Worker Dietary Aid Speech Language Pathologist Dietitian(Nutritionist) Social Worker Imaging Technologist Spiritual/Pastoral

Care Laboratory Technologist Recreational Therapist Nursing: Registered Nurse Respiratory Therapist Nursing: Practical Nurse Therapy Assistant Occupational Therapist Nurse Practitioner Other (specify)

Please indicate:

Years in practice (since achieving license to practice):___; **Years with your current team**: ___