

The Canadian Journal for the Study of Adult Education La revue canadienne pour l'étude de l'éducation des adultes



Exploring Interprofessional Learning in Collaborative Care Teams

A Case Study in Primary Health Care

Sarah O'Brien and Leona M. English

Volume 34, Number 1, June 2022

URI: <https://id.erudit.org/iderudit/1091542ar>
DOI: <https://doi.org/10.56105/cjsae.v34i1.5639>

[See table of contents](#)

Publisher(s)

Canadian Association for the Study of Adult Education / L'Association canadienne pour l'étude de l'éducation des adultes

ISSN

0835-4944 (print)
1925-993X (digital)

[Explore this journal](#)

Cite this article

O'Brien, S. & English, L. (2022). Exploring Interprofessional Learning in Collaborative Care Teams: A Case Study in Primary Health Care. *The Canadian Journal for the Study of Adult Education / La revue canadienne pour l'étude de l'éducation des adultes*, 34(1), 67–83. <https://doi.org/10.56105/cjsae.v34i1.5639>

Article abstract

This study focuses on interprofessional learning and education in collaborative care teams in primary health care. Using a case study methodology, the researcher collected data through semi-structured interviews and document analysis. Through purposeful sampling, the study explores the experiences of five diverse health professionals (two nurses, two dietitians, one physician) working within collaborative care. A critical incident framework approach was used to identify interprofessional learning themes, which were classified as collaborative, continuous, and reflective. The study identified enablers to interprofessional learning as supportive time and space, trusting relationships, and shared values among team members. The interpretive framework of this study aligned experiential learning, situated cognition, and reflective practice learning theories to support the interprofessional learning process within collaborative practice teams. The study affirms the importance of informal interprofessional learning among health-care professionals.

cjsae

the canadian journal for the study of adult education

la revue canadienne pour l'étude de l'éducation des adultes

rcééa

EXPLORING INTERPROFESSIONAL LEARNING IN
COLLABORATIVE CARE TEAMS: A CASE STUDY
IN PRIMARY HEALTH CARE

Sarah O'Brien and Leona M. English

*The Canadian Journal for the Study of Adult Education/
La revue canadienne pour l'étude de l'éducation des adultes*
Editors-in-Chief: Adam Perry and Robin Neustaeter
French Language Editor: Jean-Pierre Mercier
www.cjsae-rceea.ca

34,1 June/juin 2022, 67–83
ISSN1925-993X (online)

© Canadian Association for the Study of Adult Education/
L'Association canadienne pour l'étude de l'éducation des adultes
www.casae-aceea.ca

EXPLORING INTERPROFESSIONAL LEARNING IN COLLABORATIVE CARE TEAMS: A CASE STUDY IN PRIMARY HEALTH CARE

Sarah O'Brien

St. Francis Xavier University

Leona M. English

St. Francis Xavier University

Abstract

This study focuses on interprofessional learning and education in collaborative care teams in primary health care. Using a case study methodology, the researcher collected data through semi-structured interviews and document analysis. Through purposeful sampling, the study explores the experiences of five diverse health professionals (two nurses, two dietitians, one physician) working within collaborative care. A critical incident framework approach was used to identify interprofessional learning themes, which were classified as collaborative, continuous, and reflective. The study identified enablers to interprofessional learning as supportive time and space, trusting relationships, and shared values among team members. The interpretive framework of this study aligned experiential learning, situated cognition, and reflective practice learning theories to support the interprofessional learning process within collaborative practice teams. The study affirms the importance of informal interprofessional learning among health-care professionals.

Résumé

Cette étude se penche sur l'apprentissage et l'enseignement interprofessionnels en équipe collaborative en soins de santé primaires. Suivant une méthodologie d'étude de cas, la chercheuse a recueilli les données par le biais d'entrevues semi-structurées et d'analyse de documents. À l'aide d'un échantillonnage intentionnel, l'étude explore les expériences de cinq professionnels de santé de divers domaines (2 infirmières, 2 diététistes, 1 médecin) travaillant en soins collaboratifs. Une approche axée sur les incidents critiques a été appliquée afin d'identifier les thèmes d'apprentissage interprofessionnel, qui étaient ensuite catégorisés comme collaboratifs, continus ou réflexifs. L'étude a identifié des catalyseurs d'apprentissage interprofessionnel, notamment le temps et l'espace accueillants, les relations de confiance et les valeurs partagées entre les membres de l'équipe. Le cadre interprétatif de cette étude a réuni

*The Canadian Journal for the Study of Adult Education/
La revue canadienne pour l'étude de l'éducation des adultes
34,1 June/juin 2022, 67–83
ISSN1925-993X (online)*

© Canadian Association for the Study of Adult Education/
L'Association canadienne pour l'étude de l'éducation des adultes

l'apprentissage expérientiel, la cognition située et les théories d'apprentissage de pratique réflexive qui soutiennent le processus d'apprentissage interprofessionnel au sein des équipes de pratique collaboratives. L'étude affirme l'importance de l'apprentissage interprofessionnel informel parmi les professionnel·les de soins de santé.

A theory of adult health learning links critical adult learning theory and health to increase awareness of the barriers to achieving health. This theory supports opportunities for a more participatory approach to achieving health and encourages health practitioners to act as change agents for more comprehensive adult learning and an equitable health-care system. Yet there is still a need to bridge the gap between adult learning and health to increase knowledge and ability to improve health (Hill, 2016). Primary health care has been working to draw attention to lifelong learning and continuing professional development, with a particular focus on the context of interprofessional education (Nova Scotia Health Authority, 2017; World Health Organization, 2010). Yet most of the research in this area focuses on patient and system outcomes with little attention to the learning needs of health professionals. This article furthers the cause by investigating the interprofessional learning of health professionals in a collaborative practice context (Bareil et al., 2015; Nova Scotia Health Authority, 2017).

Brandt (2018) called for a redesign of health education to better support interprofessional education and practice. There is a need to leverage, and more explicitly guide, the application of adult learning principles in order to reach full potential of interprofessional education in health-care redesign. In line with the scholarly discourse among continuing professional educators, which spans the professional discipline, Coady (2016) argued for a shift in focus within interprofessional education, from delivering content to enhancing learning among health professionals within their varied and complex environments.

This study builds on these earlier discussions to gain a better understanding of how interprofessional learning occurs within collaborative care teams in primary health care. The data will better inform the inclusion of interprofessional learning opportunities aimed at improving collaboration among care teams, and deepen an understanding of how interprofessional learning can be supported through continuing professional education to more closely align with the field of adult learning (Coady, 2019).

Background and Canadian Context

Much of the scholarly work in continuing professional education underscores the idea that professional knowledge is embodied, contextual, and embedded in the practice environment (Coady, 2016, 2021). On a national level, shifts are occurring in primary health care to support collaborative teams, to enhance patient-centred care (CIHC, 2020), and to better address social determinants of health and provide upstream preventative care to patients (Aggarwal & Hutchison, 2012). One enabler for improving these gaps in care was the development of collaborative interprofessional primary care teams (Aggarwal & Hutchison, 2012), comprising a physician, nurse practitioner, registered nurse, and/or other health providers such as a mental health therapist, dietitian, or physiotherapist. Collaborative practice maximizes care delivery by strengthening the expertise of individual health professionals, thereby enabling the collaborative team to work at its highest scope of

practice (World Health Organization, 2010). This shift—from a focus on the clinical power and authoritative health knowledge on the part of a physician as the primary practitioner, to an interprofessional team—is viewed as more patient-centred. It is essential to centre on building relationships, trust, and empowerment within the collaborative interprofessional team delivery to support adult health learning in the community (Bareil et al., 2015; Howard et al., 2016). This approach does not ignore a power differential, but it works to decrease it.

In 2014, Alberta Health published a primary health-care strategy with the aim of supporting citizens to be as healthy as they can be. One of the cultural changes was to develop collaborative health homes to improve care delivery. To support the shift in a health professional's practice toward working within a collaborative model, there is a need to better support health professionals' learning and overcome the recognized barriers to interprofessional learning. To do so requires a better understanding of how the transfer of interprofessional knowledge and skills occurs among the collaborative team.

Interprofessional learning needs to be positioned at the forefront of primary health care. Health professionals and students who participate in interprofessional education have demonstrated greater knowledge of and respect for the roles of professionals within the collaborative team, as well as a greater understanding of the importance of working within a collaborative team (Chan & Wood, 2010). An exemplary case study focused on designing and implementing interprofessional education among health professionals showed that the team appeared to have improved their capacity for communication and illustrated a greater clarity of team members' professional roles (World Health Organization, 2013). This increased collaborative dialogue and co-construction of knowledge are evidence of building communities of practice (COPs) (Wenger-Trayner et al., 2015) that embody the concepts of sharing of power, social construction of knowledge, and learning from experience among members of the team (Cranton, 2016; Michelson, 2020).

To achieve these competencies, a shift in the way a professional thinks, as well as a shift in values related to practice, is required (Sargeant, 2009). The learning can be characterized as developing a critical awareness of the self within the professional team and within the social and contextual context (Cervero & Daley, 2016). Yet there are limitations to formal interprofessional education: outcomes can be limited to short-term changes in skills and knowledge (Lash et al., 2014). To guard against this constraint, changes need to be integrated into everyday practice, language, and communications to truly transform practices over the longer term (Conn et al., 2010). From a situated cognition perspective, learning takes place within social interactions and can be viewed as a social activity where social interactions indirectly affect elements of learning (Sargeant, 2009). Within the context of collaborative teams, COPs are well defined. COPs build on the concept of situated cognition, where learning is embedded within context and social interaction of members. Within COPs, learning is rooted within work and practice, and members learn through tactical knowledge that is shared through practice talk, observations, interactions, and working together within organizational processes (Sargeant, 2009).

A further limit to the success of interprofessional learning is rooted in the professional culture, values, beliefs, attitudes, and behaviours of a profession (Gastaldi & Hibbert, 2012; Helms & Held, 2020). As Hall (2005) observed, each professional comes with a "cognitive map" that has been developed through educational and socialization experiences. Health professionals need to learn and understand each other's cognitive map as a basis for successful collaboration. Ongoing, active learning is required to soften the boundaries and

potential rivalries that tend to exist between professionals' cultures and values and that privilege some professions more than others (Liberati et al., 2016). Effective communication, collaboration, and supportive learning structures that emphasize the knowledge and skills that each professional brings to the team could help to support the transfer of knowledge (Helms & Held; Hibbert et al., 2012).

Though there is limited research in this area (Tran et al., 2018), and that which exists is large-scale and US-based (e.g., Carney et al., 2019), much interprofessional learning occurs through informal means, through interactions within the practice environment during clinical practice, within team meetings, or through corridor discussions (Coady, 2019; Nisbet et al., 2013). Freeth et al. (2019) described this as serendipitous learning and learning that is unplanned and implicit, often occurring spontaneously through common interactions between health professionals. Nisbet et al. (2013) argued that frequently these informal interactions are both unrecognized and underused. The invisibility of this informal and incidental learning makes it difficult to operationalize, measure, and assess it, and further, that learning is complicated by the social-cultural factors that influence it (Watkins et al., 2018). Learning from experience, reflective practice, and personal development are all essential aspects that need to be embedded within interprofessional education to support professional transformative adult learning (Sargeant, 2009). Kolb popularized the theory of experiential learning with the introduction of the cycle of adult learning, "the process whereby knowledge is created through transformation of experience" (Merriam & Bierema, 2014, p. 108). Kolb's (2014) theory provides a visual illustration of cyclic learning that incorporates concrete experience, reflective observation of experience, conceptualizations of the experiences, and active experimentation to new experiences. The experience of working within practice alone is not enough to support interprofessional learning, but there is a need to transform this experience to learning through critical reflection (Kolb, 2014). Linking interprofessional education with adult learning has the potential to bridge the espoused theory of interprofessional education to reality (Cervero & Daley, 2016).

Despite the work on interprofessional education carried out by the World Health Organization (2010, 2013) and scholarly discourse in academic journals (Brandt, 2018; Chan & Wood, 2010; Conn et al., 2010), there is limited research on how interprofessional learning occurs within practice settings to support the overall goal of interprofessional education, especially in the context of collaborative care teams. What is still needed is a deeper understanding of how interprofessional learning occurs within collaborative care teams.

The primary research questions in this study were as follows: How does interprofessional learning occur among members of collaborative care teams? What factors or conditions enable interprofessional learning? And how do we facilitate interprofessional learning among members of collaborative care team?

Research Methodology

Using an interpretative lens with a case study methodology, the researcher collected data using semi-structured interviews and document analysis to investigate the learning of health participants in teams. The interpretive framework of this study was informed by experiential learning, situated cognition, and reflective practice learning theories seen as relevant to supporting the interprofessional learning process within collaborative practice teams.

The case under review here was an Alberta-based collaborative care team in primary health care. The researcher focused on rich holistic descriptions of the learning, its situatedness, and its contextual factors (Merriam & Tisdell, 2015). The case study offered the researcher an opportunity to explore the case through multiple lenses using a variety of data sources. Care was taken to ensure that the researcher gave voice to these experiences considered to be rooted in real-world contexts, through “thick descriptions” to construct knowledge and meaning (Yin, 2018). The focus was rural Canada and the approach was small and focused.

For the purpose of this case study, there were both primary and secondary methods of data collection, including semi-structured interviews and document analysis. An interview method as the primary research method allowed the researcher to gather data that one could not observe: the behaviours, feelings, thoughts, and intentions of the interviewee (Merriam & Tisdell, 2015). A semi-structured interview allows for a flexible, exploratory, and open-ended conversation with participants. The secondary research method was document analysis, which helped to elicit meaning of timely and relevant documents, gain a better understanding of the practice context, and support knowledge creation (Bowen, 2009). The documents included the new staff orientation schedule and the results from a team engagement session completed for an annual survey on team effectiveness. The section below details the participants, research site and access, recruitment and selection, and data collection and analysis of the research study.

Primary Care Networks (PCNs) are the most common form of team-based care in Alberta. PCNs are groups of physicians working collaboratively with teams of health-care professionals to provide patient and community-centred care to meet the health needs in their communities (Alberta Health, 2018). The first author served as a program manager of a team of health professionals working collaboratively with the physician membership, but did not choose any participants she supervised.

Five participants were recruited through purposeful sampling. This sample included one physician, two registered nurses, and two registered dietitians working in one clinic with a professional staff of approximately 20 people. All participants had been working within primary care, and among a collaborative team, for a minimum of 2 years. Despite the goal to be inclusive of sex and gender, all participants were female. Attempts to recruit physicians failed due to a limited number available and the high work load of those who were approached.

Data Collection and Analysis

The technique of identifying a critical incident was used to facilitate the semi-structured interviews with each individual. This approach allows for the collection of rich and meaningful experiences that occur within practice, with the purpose of bringing about improvements or understanding within the group. Using this technique enabled participants to prepare for the discussion by reflecting back on noteworthy experiences in their professional life.

Prior to the interview, participants were asked to identify an incident or experience from their practice that illustrated interprofessional learning within a collaborative team. The main interview questions were sent along with the invitation to participate, giving participants time to think about experiences they would like to share during the interview.

The follow-up questions were asked as needed in the interview to facilitate reflection, support the critical process of analyzing their practice, and uncover influences, motivations, values, and knowledge. Transcripts were sent to the participants to allow them to check for any errors or corrections.

During data analysis, themes were identified using a deductive process (Angelides, 2001). This deductive process involved comparing the data collected from both experiences and critical moments revealed by interviewees, as well as data generated from document analysis. The initial phase of the data-analysis process included listening to the audio recordings in full and reflecting on the themes emerging throughout all experiences noted by the participants. Following transcription, identified themes were colour-coded. Transcriptions were reviewed individually and themes were highlighted accordingly within each.

Data Findings and Analysis

Below is a discussion that details the themes identified through the critical incident technique, which helped to focus the discussion on learning.

Importance of Team Meetings and Case Conferences

The primary finding identified in this study is that interprofessional learning was shared and was a collaborative process between health professionals on a team. All five participants identified that their predominant interprofessional learning occurred through informal learning when professionals on the team shared their perspectives, asked questions, practised together, and participated in opportunities to discuss challenging cases within patient care. Tracy, the registered dietitian, identified the context of team meetings as an opportunity to learn from each other:

At things like our case conferences, that is where some of the really great impromptu learning happens. When you are talking about a client that maybe has been a bit challenging, and as you are discussing it, that is when someone with a completely different perspective from you may chime in and say, "Oh well, it kinda sounds like this person might have..." You may never have thought about that.

Elsie, a dietitian in the early years of her career, stated that these shared and collaborative learning opportunities helped her see other perspectives on the team:

It is easy for us within our own disciplines to have the lens of nutrition and mental health—or case manager. It can help with that tunnel vision effect and open up the broader focus/picture. It also helps with all learning, keeping up-to-date evidence with different areas of practice. With other dietitians I work with, they may share information they might have read or is of their interest.

Interestingly enough, Patsy, a nurse nearing the end of her career, also described the shared learning occurring in case conferences as allowing her to understand the perspectives of other professionals on the team. She described these interactions as very influential:

We would meet weekly and someone on the team would present a challenging case. It was so great to be a part of a large team that offered

their knowledge on specific challenges that we were addressing at the time. I learned SO much.

The participants further noted that this shared learning occurred simply by asking questions, being curious, and working together within practice. These curious interactions led to a greater understanding of the role of other health professionals, how they contributed to patient care within the collaborative team, and the impact on their individual professional practice within the team. Patsy, one of the nurses on the team, described this learning as follows:

I learned things I hadn't even thought about before when we practise together—like some of the language they used. I found the rehab health professionals (OT, physio) tended to use a strength-based approach to problem-solve, whereas in the nursing profession we were taught with a problem-based approach.

One of the dietitians, Tracy, described her daily informal interactions within the team in the working environment as key opportunities for learning;

We might be talking about a client we were struggling about...and the social worker might pipe up and say, "Oh have they applied for this funding or that funding . . ." and I ask if we refer them to the social worker on the team. From this, I learn about community resources or funding resources. Sometimes if I can talk about a patient that I have been struggling with or stuck with, our mental health therapist might hear me talking and reflect back and ask me questions that I hadn't considered before.

Kim, a nurse on the team, discussed a significant learning experience when she had the opportunity to work alongside the nurse practitioner with a patient:

I had the opportunity one time to do a two-on-one with one of our nurse practitioners. We had a patient that we were really worried about. So we brought him in so we could do an intervention with him....She has a strong background in mental health and is also a nurse practitioner, it was definitely a good learning experience to follow her lead.

Interprofessional Learning Is a Continuous Process

The second finding common among the five participants was that interprofessional learning was seen as a continuous process, even though this learning was interpreted somewhat differently in each case. Patsy, a registered nurse who has been in practice for over 20 years, felt that ongoing learning occurred every time the team got together: "I think it was repetition—weekly case conferences and interactions, they were often very complicated situations. As they came up over and over again it helps to see the outcomes." Each learning experience within the team, starting from their undergraduate learning to learning in practice, seemingly built on the past experience and continuously supported interprofessional learning among the team. Elsie and Susan also had this experience.

Susan, the family care physician, drew on her long interprofessional learning from overseas:

I think it was in my training, I was never trained to do it [provide patient care] on my own. The training in South Africa—in our undergrad we spend time training with the physios, OTs, and dietitians. During our training, we split up but still had rotations that we had to work together.

The critical incident framework had unexpected outcomes. In addition to participants naming the specific incident as having a critical impact, the framework helped in showing that learning was continuous. Tracy, in looking back, described her difficulty in choosing only one critical moment, stating that "almost every single person in my career has been seen within a team." She went on to identify that all her professional experiences have been working within teams, but noted that daily interactions supported her professional development in collaborative care and were where she gained a better understanding of how to use her team:

I think in that case we all bring to the table our own professional experiences and also life experiences.... Just because I am a dietitian doesn't mean that I am good at or have every answer for every nutrition question. Same goes for a social worker or a mental health or exercise therapist.

For Kim and Patsy, interprofessional learning was illustrated as a continuous process not only rooted in undergraduate learning and communications within the daily interactions with the team, but also embedded in practice working with the patients as part of the team. Elsie, the dietitian, described learning from her patients:

I love to hear their reflection on how things are going and if they are comfortable [with] what they are doing with the team. I can then get a good understanding about the team from the client's perspectives. The client can be a teacher for me too—it levels the playing field.

Interprofessional Learning Occurs With Reflective Opportunities Within Practice

The third finding identified through the thematic analysis process is that interprofessional learning occurs with reflective opportunities within practice. Among the participants, all with diverse backgrounds and at various stages in their careers, there were shared experiences that positively influenced their learning. They appreciated opportunities to ask questions, reflect on the care being delivered, and think about their role and the role of others within the team. The participants noted the importance of having opportunities to problem-solve with the team and to have a follow-up interaction to discuss the outcomes. Elsie noted:

It is at the case conferences that can build the importance of working within the team, discussing the wins, follow up on last week's discussion. Having the follow-through and share the outcomes. [We could ask,] "Why was it helpful?" And learning how we could then incorporate this into another patient with a similar case and discussing what we could have done differently.

Patsy, a nurse close to retirement, described the opportunities to solve problems and ask each other questions as critical and significant learning. She saw these experiences as critical moments to increase understanding and remind her why she does the work she does:

At the end of the day—when you can sit together and problem-solve and it works...it is like oh my gosh—it is really and truly about improving the life of the individual....It is really and truly powerful—it is about enhancing the client's life.

Susan described the importance of these reflective interactions to support a common understanding of the roles and perspectives within the team:

Keto diet is a fine example. We learn one thing about it and the dietitians learn another thing. And then when we want to refer patients, they say no and we just go, "Those dietitians don't know what they are talking about." And this dietitian thinks this physician is crazy because they want them on the keto diet, BUT the fact of the matter is that if we actually sat and asked each other questions and told them what I knew and they told me what they knew—it would be like, yes, that makes sense.

Four out of the five participants identified that the process of applying the critical incident framework within the semi-structured interview was unexpectedly valuable in understanding interprofessional learning and how it has influenced their practice. Tracy described the experience of the interview as helping her change the way she thinks about practising in the future: "This process has made me more aware. This is going to make me tune in more. This learning all just happens so naturally that sometimes you don't even realize."

Interprofessional Learning Occurs When There Is Supportive Time and Space Within Practice

All five participants valued the collaborative space in fostering shared learning and reflection, in essence creating a culture of learning. They also highlighted the need to have these reflective spaces supported and recognized by their organization's leaders. In Patsy's words, "You need to have good leadership who are visionary and who see the importance in it to create the time for it to happen." Kim described this as a culture where silos are broken down and the team comes together, rather than her previous workplace.

These supportive spaces for learning included formal spaces, regular meetings, case conferences, and joint clinical time, and included being fluid within unplanned interactions and simply being co-located, as described by Susan: "I just think about me working with other physicians—I automatically ask them, 'Hey, what would you do in this case?' And they automatically ask me, 'What would you do in this case?' And so we learn from each other. So regardless who [which health professional on the team] is in that room, that would happen."

Elsie also described how opportunities to communicate and create supportive space were essential in supporting learning:

In our case conferences, we come together weekly/biweekly, we are able to bring cases that we are not really sure what to do next or bring some of those great moments too. I think that is really empowering for the team as well. We are pretty good at bringing those empowering stories as well as the challenging, and able to support each other in all different areas.... Time, time is a genuine barrier, so having the time to do it. There needs to be team buy-in, support from managers in terms of setting schedules and leading by example.

Tracy, a dietitian, identified the barriers of having time and space for collaboration within the teams, but further emphasized that these interactions help patients.

Interprofessional Learning Is Supported by Building Trusting Relationships and Shared Values

The fifth and final theme is an outcome of the creation of a supportive learning culture described in the previous finding: interprofessional learning is supported by building trusting relationships and shared values among the team members. Patsy described how formal and informal interactions have a great impact on how effective a team functions: "If you are every day meeting with your peers and having those informal conversations, not only are you building trust. The more I know what you are doing with the person [patient], the more you trust the process." Susan further noted the difficulties her team had with introducing a new professional to the team; she expressed that if the professional was introduced and given an opportunity to learn about her as a person, the team could take a step toward learning how to work together: "Yes, even just go, 'This is Sarah.' Her name isn't the midwife—she is a lovely human being."

In respect to common values, when asked what collaborative care meant to this diverse sample of participants, ranging in age, experience, and professional knowledge, participants described it as working together for the patients, using the team's skill set and knowledge, open communication and respect for the team, and patient-centred care. It was apparent that this shared value of collaborative care as a best practice to improve patient care was present.

Document Analysis

Given the contextual factors that can impact interprofessional learning, the second method of data collection was document analysis of the new staff orientation schedule, the results from the annual team effectiveness survey, and team meeting agendas.

An analysis of these documents showed parallels with the themes identified, namely that interprofessional learning occurs when there is supportive time and space within practice, and interprofessional learning is supported by building trusting relationships and shared values.

The new staff orientation schedule offered time and space for new staff members to meet one-on-one with each diverse health professional to understand the role of each provider on the team and their values as a professional, and an opportunity to begin to build trust and relationships within the team. The second document detailed the results of the annual team effectiveness survey. Each year the network administers a team effectiveness survey to assess how the domains of effective teamwork are being met and supported. During the year of the study, the survey was administered via a platform titled Mentimeter, an interactive presentation that allows for real-time voting and engagement. The process brought the team together in one room to have constructive discussions within the domains of effective teamwork and patient-centred care delivery. This experience allowed opportunities to have interprofessional learning, build trusting relationships, and problem-solve in a safe and supportive environment.

Discussion of Findings

The purpose of this research study was to gain a better understanding of how the transfer of knowledge and skills occurs within interprofessional learning and what factors enable and limit this learning within the context of interprofessional teams. The answer to the primary research question—how does interprofessional learning occur among members of collaborative care teams?—has proven to be complex and rooted within social-cultural factors. According to the World Health Organization (2010), when guided by adult learning principles, interprofessional education supports the development of collaborative, practice-ready health-care teams. This discussion sheds light on how the themes emerging from the research align with adult learning theory, with discrepancies noted.

Interprofessional learning is shared and collaborative. Participants stated that they were able to learn how to work together, with this learning described as collaborative and shared. They noted common values and rich conversations, which allowed them to better understand each other's roles on the team, strengthened their professional practice within the team, and improved their overall patient care delivery. Whereas much research focuses on individual learning (Coady, 2019), this study affirms the value of collective learning (though it was limited by the lack of physician participation).

When their interprofessional education experiences surfaced, their learning mapped their development over their careers. To align these identified learning experiences within the framework of the social construction of knowledge, the learning theory acknowledges the importance of where and how the contexts shape the learning itself and how the learning occurs as people interact (Michelson, 2020). As with Wenger-Trayner et al.'s (2015) community of practice theory, this study showed a shared interest and commitment to improvement through intentional and communal effort. Participants were aware that although they were a great team, they were not using the language of COP. Three predominant features of COP were evident through their discourse: a shared interest, engagement in information sharing, and a shared resource (e.g., sharing experiences and/or strategies for problem solving) or a shared practice.

In this study, there was evidence of shared interest and focus on the patient, engagement and information sharing within clinical practice, and shared resources in the form of sharing stories and perspectives within their practice. Further, through a social-cultural informal learning lens, this collaborative learning can be described as open-ended and facilitated through collective problem solving, where groups may influence others' learning in a serendipitous manner within an organization (Watkins et al., 2018). Interprofessional learning can contribute to identifying community and patient needs (Muller et al., 2019) and, ultimately, to strengthening health systems (Murphy et al., 2019).

Interprofessional learning is a continuous process. The participants stated that this learning occurred over time in their practice. Patsy, a registered nurse, described her learning as occurring within the repetition of everyday practice. When very complicated situations were presented repeatedly, she would learn from collegial interactions and outcomes (Hibbert et al., 2012), which stimulated reflection on action (Bolton, 2018) in a way that may increase understanding of how to work together and to value the roles of others. This informal and everyday learning (Watkins et al., 2018) evolves from tacit knowledge stemming from working within the team. The daily engagements that support interprofessional learning occurred long after formal education and continued in practice embedded in interactions

with professionals and patients in care. Not surprisingly, participants like Tracy were perplexed with the task of choosing only one critical experience that affected their learning. This supports Brandt's (2018) findings about how professionals learn together. This process of continuous professional learning led by experience and interactions among the team involves learning about the culture of the team and developing a professional identity within the context (Helms & Held, 2020).

Interprofessional learning occurs with reflective opportunities within practice. Participants stated that when there were opportunities to ask questions and to reflect on their experiences within the team and with patients, their professional practice and knowledge deepened. Participants noted that the critical incident framework allowed reflection on their learning and facilitated a better understanding of how learning could influence future practice (Bolton, 2018). Learning from experience is the act of making meaning through communication and critical self-reflection; this learning typically results in greater comprehension (Michelson, 2020). The theory of reflective practice recognizes the importance of professional knowledge from experience and, further, has the potential to close the gap in the espoused theory of interprofessional education (Coady, 2019). The participants in this study had daily lived experiences combined with the opportunity to critically reflect on these experiences to enhance interprofessional learning opportunities.

Kolb's (2014) cyclic process of learning incorporating concrete experience, reflective observation, conceptualization, and active experimentation may be continuous and start and stop at any point within the cycle. This theory provides a framework to guide operational planning and interprofessional team functioning, with a means to foster learning opportunities. The reflective observation offers a richer understanding of the perspective of the patients and professionals on the care team, while the abstract conceptualization would allow the professionals to ask, reanalyze, and consider new ways to manage care within the team. Lastly, active experimentation would enable the professionals to implement their learning within the interprofessional model in the future (Kinnair et al., 2014). This model of experiential interprofessional learning would encourage health professionals to reflect on collaborative practice and professional roles with the care team and take greater advantage of the learning opportunities that occur in practice. This process appeared to be occurring at opportune times within practice for participants within this study. Greater support to occur more frequently would bring the everyday implicit learning to explicit learning within practice. The experience of working within practice alone is not enough to support interprofessional learning. There is a need to transform this experience to learning through critical reflection (Kolb, 2014).

Further, Wenger-Trayner et al.'s (2015) perspective on the social learning theory, as articulated in *Learning in Landscapes of Practice*, shows the importance of locating yourself within the practice to support learning. Three essential modes to enable this learning within practice are active engagement within the group, imagination to allow practitioners to locate themselves as a provider within context, and alignment allowing the providers to fit their perspectives to the context (Wenger-Trayner et al., 2015). These modes of identification align with the themes of collaborative, continuous, and reflective learning. They support Sargeant's (2009) and Brandt's (2018) finding that participants saw interprofessional education as requiring a new way of thinking and constructing knowledge, and also of building awareness and respect of other professionals' perspectives and roles. The knowledge of how one works within the team becomes the focus of learning within the COP by sharing

experiences and stories and working together to enhance collaboration. This study supports Sargeant's suggestion that reflective learning, learning from experience, and transformative learning theories are integral to the design of interprofessional education. This tacit knowledge and learning in practice can be related to the more novice adult learning, where reflection-in-action is occurring (Bolton, 2018).

The secondary question in this research was, what factors or conditions enable interprofessional learning? The two themes identified within the professionals' experiences that enable interprofessional learning were *supportive time and space to build relationships and shared values*. The historic barriers to interprofessional education are deeply rooted in hierarchical domains and power struggles among health professionals on the team (Bonello et al., 2018; Gastaldi & Hibbert, 2012). Barriers (Helms & Held, 2020) are not insurmountable, but they can be challenging. As Elsie observed, compartmentalization can lead to inequalities and power imbalance affecting learning and care delivery within the collaborative practice (Bonello et al., 2018; Brandt, 2018). When trusting relationships are formed and common values are shared, the participants noted that learning occurred more fluidly. As confirmed by other researchers (Egan-Lee et al., 2008), the support is needed both formally and informally and needs to be ongoing. While power dynamics are often cited as barriers to interprofessional learning (Bonello et al., 2018), the established nature of this small team served to strengthen relationships and overcome power as a barrier to learning.

The participants noted that a second enabler to interprofessional learning was the importance of having protected time and space to interact with the team. These interactions were both informal—several times the importance of the “open-door policy” was described within the team to support team functioning—and formal within spaces that were supported by leadership in the practice environment. One participant spoke of the importance of building a learning culture that needs to be supported by leadership. Wenger-Trayner et al.'s (2015) work with the social learning theory and COP stated that there is a need for social learning spaces where there is genuine dialogue and experience sharing. The participants emphasized the critical importance of having space to share discourse, solve problems, and learn from one another to support this collective learning. This perspective underscores that working with a team for a shared responsibility authentically emphasizes the diverse knowledge and skills on the team to support interprofessional and transformative learning (Cranton, 2016; Gastaldi & Hibbert, 2012). The knowledge gained through this learning can be coined communicative and emancipatory knowledge, as it is socially constructed through dialogue, gained through shared experiences with the exchanging of ideas, and features power-sharing among the team (Cranton, 2016).

The adult learning theories of reflective practice, experiential learning, informal learning, and situated cognition are found in the themes as a framework to gain a better understanding of how to further support interprofessional learning. Reflective practice and experiential learning (Coady, 2016) offer the health-care provider an opportunity to build knowledge, skills, and values from experiences and professional practice within the team. Learning from experience, reflective practice, and personal development, then, are all essential aspects that need to be embedded within interprofessional education to support professional transformative adult learning (Sargeant, 2009).

Yet there are themes that one might expect here that did not arise. For instance, there was limited discussion of power and policy, which are a routine part of discussions of learning. Most of the data here affirm the benefit of learning and the value of having participants

talk about group experience: the research time itself served as a catalyst for crystallizing learning that had occurred and the value placed on the experience. Yet the only time that there was discussion of issues and conflict was with regard to the organizational barriers to dedicating time and space to reflective group practice. Within the context of primary health care, there are deeply rooted cultural norms, including the historical top-down medical model of service provision that has existed for generations. Further study directly focused on these organizational issues is needed.

Significance and Contributions

The analysis of the participants' experiences provides rich interpretations of interprofessional learning, contributes to the body of literature within adult and interprofessional learning, and contributes to the participants' own learning journey. The findings also provide a greater understanding of how this learning occurs, emphasizing the importance of the collective learning that can occur within the team to support interprofessional learning, and ultimately enhance practice.

The findings of this study contribute to the discourse of integrating adult learning theory and principles within interprofessional learning. The adult learning theories of situated cognition, experiential learning, and reflective practice can illustrate how the implicit learning within everyday practice in collaborative care teams can be identified and transform to explicit learning. The participants' voices begin to tell the story of how adult learning occurs in health practice and the essence of how context, culture, and leadership can support it. In collaborative care models, different health professionals with vast experiences and backgrounds are expected to join together; therefore, as the teams change and grow, the findings in this study will support the operational planning and continue to support the importance of creating a culture of learning and collaboration.

What is further required is a better understanding of how to support professionals to identify daily implicit learning opportunities within collaborative practice and how to support a critically reflective practice among collaborative teams to ensure the sustainability of collaboration and lifelong professional learning. There is also room to examine further individual learning, as most of the learning in this study occurred within the team. Furthermore, there is the potential to continue integrating interprofessional learning into the field of adult lifelong learning, while aligning teamwork in health care as a learning practice.

References

- Aggarwal, M., & Hutchison, B. (2012). Toward a primary care strategy for Canada. *Canadian Foundation for Healthcare Improvement*. <https://doi.org/10.13140/RG.2.2.13854.05442>
- Alberta Health. (2014). Alberta's primary health care strategy. *Alberta Health*. <https://open.alberta.ca/dataset/9781460108635>
- Angelides, P. (2001). The development of an efficient technique for collecting and analyzing qualitative data: The analysis of critical incidents. *Qualitative Studies in Education*, 14(3), 429-442.
- Bareil, C., Duhamel, F., Lalonde, L., Goudreau, J., & Hudon, É. (2015). Facilitating implementation of interprofessional collaborative practices into primary care: A trilogy of driving forces/practitioner application. *Journal of Healthcare Management*, 60(4), 287-301. PMID: 26364352

- Bolton, G. (2018). *Reflective practice: Writing and professional development* (5th ed.). Sage.
- Bonello, M., Wright, J., Morris, J., & Sadlo, G. (2018). Bourdieu and interprofessional education: What's the relevance? *Studies in Continuing Education*, 40(1), 1–16. <https://doi.org/10.1080/0158037X.2017.1360269>
- Bowen, G. A., (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2). <https://doi.org/10.3316/QRJ0902027>
- Brandt, B. (2018). Rethinking health professionals' education through the lens of interprofessional practice and education. *New Directions for Adult and Continuing Education*, 157, 65–76. <https://doi.org/10.1002/ace.20269>
- Carney, P. A., Thavera, E. K., Palmera, R., Galnera, A. B., Zierlerb, B., & Eiffa, P. M. (2019). The benefits of interprofessional learning and teamwork in primary care ambulatory training settings. *Journal of Research on Interprofessional Practice and Education*, 15, 119–126.
- Cervero, R. M., & Daley, B. J. (2016). Continuing professional education: A contested space. *New Directions for Adult and Continuing Education*, 151, 9–18.
- Chan, A. K., & Wood, V. (2010). Preparing tomorrow's healthcare providers for interprofessional collaborative patient-centred practice today. *University of British Columbia Medical Journal*, 1(2), 22–24.
- CIHC. (2020). Canadian Interprofessional Health Collaborative (CIHC) framework. <https://www.mcgill.ca/ipeoffice/ipe-curriculum/cihc-framework>
- Coady, M. J. (2016). Continuing professional education: Enduring challenges, new developments, and future vistas. *New Directions for Adult and Continuing Education*, 151, 91–96.
- Coady, M. (2019). Informal professional learning in a community-based health education program: The transformative learning of one interprofessional team. In T. Carter, C. Boden-McGill, & K. Pino (Eds.), *Transformative learning, resilience, and professional identity formation* (pp. 321–342). Information Age Publishing.
- Coady, M. J. (2021). Continuing professional education. In T. Rocco, M. C. Smith, R. C. Mizzi, L. R. Merriweather, & J. D. Hawley (Eds.), *The handbook of adult and continuing education* (pp. 257–265). Stylus.
- Conn, L. G., Oandasan, I. F., Creede, C., Jakubovicz, D., & Wilson, L. (2010). Creating sustainable change in the interprofessional academia primary care setting: An appreciative inquiry approach. *Journal of Research on Interprofessional Practice and Education*, 1(3), 284–300.
- Cranton, P. (2016). Continuing professional education for teachers and university and college faculty. *New Directions for Adult and Continuing Education*, 151, 43–52.
- Egan-Lee, E., Hollenberg, E., Dematteo, D., Tobin, S., Oandasan, I., Beduz, M.-A., Kwan, D., Leslie, K., Lee, J., Tassone, M., Merkley, J., Lingard, L., Sinclair, L., Lowe, M., Nashman, D., Creede, C., Day, D., Silver, I., & Reeves, S. (2008). Catalyzing and sustaining communities of collaboration around interprofessional care: An evaluation of four educational programs. *Journal of Interprofessional Care*, 22(3), 317–319. <https://doi.org/10.1080/13561820801886669>
- Freeth, D., Savin-Baden, M., & Thistlethwaite, J. (2019). Interprofessional education. In T. Swanwick, K. Forrest, & B. C. O'Brien (Eds.), *Understanding medical education: Evidence, theory and practice* (3rd ed.) (pp. 191–206). Wiley.

- Gastaldi, B., & Hibbert, K. (2012). Interprofessional education for sports' health care teams: Using the CanMEDs competencies' framework. In L. M. English (Ed.), *Adult education and health* (pp. 247–258). University of Toronto Press.
- Hall, P. (2005). Interprofessional teamwork: Professional cultures as barriers. *Journal of Interprofessional Care, 1*, 188–196.
- Helms, K. L., & Held, M. L. (2020). Navigating the challenges of integrating and assessing interprofessional education. *New Directions for Teaching and Learning, 31*–44. <https://doi.org/10.1002/tl.20389>
- Hibbert, K., Hunt, M., & Hibbert, W. (2012). Informed biography as a focus for interprofessional learning: The case of 'impaired driving causing death.' In L. M. English (Ed.), *Adult education and health* (pp. 259–272). University of Toronto Press.
- Hill, L. H. (2016). Interactive influences on health and adult education. *New Directions for Adult and Continuing Education, 149*, 41–50. <https://doi.org/10.1002/ace.20175>
- Howard, H. A., Malouin, R., & Callow-Rucker, M. (2016). Care managers and knowledge shift in primary care patient-centered medical home transformation. *Human Organization, 75*(1), 10–20. <https://doi.org/10.1177/0001345517732184>
- Kinnair, D., Anderson, E., Diepen, H. V., & Poyser, C. (2014). Interprofessional education in mental health services: Learning together for better team working. *Advances in Psychiatric Treatment, 20*, 61–88. <https://doi.org/10.1186/s12909-019-1465-6>
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson FT Press.
- Lash, D. B., Barnett, M. J., Parekh, N., Shieh, A., Louie, M. C., & Tang, T. T. (2014). Perceived benefits and challenges of interprofessional education based on a multidisciplinary faculty member survey. *American Journal of Pharmaceutical Education, 78*(10), 180. <https://doi.org/10.5688/ajpe7810180>
- Leslie, M., Khayat-zadeh-Mahani, A., Birdsell, J., Forest, P. G., Henderson, R., Gray, R. P., Schraeder, K., Seidel, J., Zwicker, J., & Green, L. A. (2020). An implementation history of primary health care transformation: Alberta's primary care networks and the people, time and culture of change. *BMC Family Practice, 21*, 258. <https://doi.org/10.1186/s12875-020-01330-7>
- Liberati, E. G., Gorlie, M., & Scaratti, M. G. (2016). Invisible walls within multidisciplinary teams: Disciplinary boundaries and their effects on integrated care. *Social Science and Medicine, 150*, 31–39. <https://doi.org/10.1016/j.socscimed.2015.12.002>
- Merriam, S., & Bierema, L. (2014). *Adult learning: Linking theory and practice*. Wiley.
- Merriam, S., & Tisdell, E. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Michelson, E. (2020). Truthiness, alternative facts, and experiential learning. *New Directions for Adult and Continuing Education, 165*, 103–114. <https://doi.org/10.1002/ace.20371>
- Muller, M., Snyman, S., Slogrove A., & Couper, I. (2019). The value of interprofessional education in identifying unaddressed primary health-care challenges in a community: A case study from South Africa. *Journal of Interprofessional Care, 33*(4), 347–355. <https://doi.org/10.1080/13561820.2019.1612332>
- Murphy, G. T., Gilbert, J. H. V., & Rigby, J. (2019). Integrating interprofessional education with needs-based health workforce planning to strengthen health systems. *Journal of Interprofessional Care, 33*(4), 343–346. <https://doi.org/10.1080/13561820.2019.1638758>

- Nisbet, G., Lincoln, M., & Dunn, S. (2013). Informal interprofessional learning: An untapped opportunity for learning and change within the workplace. *Journal of Interprofessional Care*, 27(6), 469–475. <https://doi.org/10.3109/13561820.2013.805735>
- Nova Scotia Health Authority. (2017, April). *Strengthening the primary health care system in Nova Scotia*. http://www.nshealth.ca/sites/nshealth.ca/files/phc_evidence_synthesis_april_2017_final_updated.pdf
- Sargeant, J. (2009). Theories to aid in understanding and implementation of interprofessional education. *Journal of Continuing Education in Health Professionals*, 29(3), 178–184.
- Tran, C., Kaila, P., & Salminen, H. (2018). Conditions for interprofessional education for students in primary healthcare: A qualitative study. *British Medical Education*, 18(122). <https://doi.org/10.1186/s12909-018-1245-8>
- Watkins, K. E., Marsick, V. J., Wofford, G. M., & Ellinger, A. D. (2018). The evolving Marsick and Watkins' (1990) theory of informal and incidental learning. *New Directions for Adult and Continuing Education*, 159, 21–36. <https://doi.org/10.1002/ace.20285>
- Wenger-Trayner, E., Fenton-O'Creevy, M., Hutchinson, S., Kubiak, C., & Wenger-Trayner, B. (2015). *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice based learning*. Routledge.
- World Health Organization. (2010). *Framework for action on interprofessional education and collaborative practice*. World Health Organization. Retrieved on May 13, 2022 from <https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice>
- World Health Organization. (2013). Interprofessional collaborative practice in primary health care: nursing and midwifery perspectives. <https://apps.who.int/iris/handle/10665/120098>
- Yin, R. K. (2018). *Case study research and applications* (6th ed.). Sage.