

1-2018

USING CLINICAL SUPERVISION TO IMPROVE INTERPROFESSIONAL COLLABORATION

Melissa Copenhaver
mcopenha@nmu.edu

Follow this and additional works at: <https://commons.nmu.edu/dnp>



Part of the [Psychiatric and Mental Health Nursing Commons](#), and the [Social Work Commons](#)

Recommended Citation

Copenhaver, Melissa, "USING CLINICAL SUPERVISION TO IMPROVE INTERPROFESSIONAL COLLABORATION" (2018).
DNP Scholarly Projects. 3.
<https://commons.nmu.edu/dnp/3>

This Scholarly Project is brought to you for free and open access by the Student Works at NMU Commons. It has been accepted for inclusion in DNP Scholarly Projects by an authorized administrator of NMU Commons. For more information, please contact kmcdonou@nmu.edu, bsarjean@nmu.edu.

USING CLINICAL SUPERVISION TO IMPROVE
INTERPROFESSIONAL COLLABORATION

By

Melissa Copenhaver

SCHOLARLY PROJECT

Submitted to
Northern Michigan University
In partial fulfillment of the requirements
For the degree of

DOCTOR OF NURSING PRACTICE

School of Nursing

December 2017

SIGNATURE APPROVAL FORM

USING CLINICAL SUPERVISION TO IMPROVE
INTERPROFESSIONAL COLLABORATION

This DNP Scholarly Project by Melissa Ann Copenhaver is recommended
for approval by the student's Faculty Chair, Committee and Department
Head in the School of Nursing

Bitsy Wedin

Committee Chair:

Date

Eileen Smit

First Reader:

Date

Anne Stein

Second Reader (optional):

Date

Kristi Robinia

Department Head:

Date

ABSTRACT

USING CLINICAL SUPERVISION TO IMPROVE INTERPROFESSIONAL COLLABORATION

By

Melissa Copenhaver

Interprofessional collaboration (IPC) is important to the future of the healthcare system in that IPC is part of the solution for promoting better healthcare outcomes (Gilbert, Yan, & Hoffman, 2010; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013). Marshall (2011) notes that “interprofessional collaborative practice promotes team identity, conserves energy by a unity in direction, and invites harmony of efforts” (p. 158). The skills needed to engage in IPC are cultivated through interprofessional education (IPE) (Reeves et al., 2013). Currently, at Northern Michigan University (NMU), there are limited opportunities included in the program curriculums of nursing students and social work students to promote the skills needed to engage in interprofessional education (IPE). The curriculums are designed as academic silos, which does not reflect the expectations for graduates entering the workforce. This project provided opportunities for nursing and social work students to use clinical supervision groups to explore their clinical experiences and expand their skills related to IPC. The students who participated in clinical supervision showed larger increases in the Interprofessional Socialization and Valuing Scale (ISVS) post scores than students not in clinical supervision groups and qualitative results suggested students felt their IPC skills increased. Findings from this project could inform future efforts to implement IPE strategies at NMU and other universities.

Copyright by
MELISSA ANN COPENHAVER
July 1, 2017

DEDICATION

The efforts that led to the completion of this project are dedicated to my family and in particular my daughter who I hope never loses her love for learning. I also wish to remember Ty Dolan who played a role in initiating this project.

ACKNOWLEDGMENTS

I would like to acknowledge Ann Crandell-Williams and all of her work towards our collaborative project.

PREFACE

Some of the cost incurred implementing this project was underwritten by a Northern Michigan University's College of Health Sciences and Professional Studies grant.

TABLE OF CONTENTS

LIST OF FIGURES	vii
Chapter One	1
Chapter Two.....	10
Chapter Three.....	24
Chapter Four	27
References.....	35
Appendix A.....	46
Appendix B.....	48
Appendix C.....	55
Appendix D.....	57

LIST OF FIGURES

Figure 1: Summary of Interprofessional collaboration pilot event undertaken in 2015.....	5
Figure 2: Comparison of the average pre- and post-scores on the ISVS for the control and experimental groups.....	29
Figure 3: Comparison of the average pre- and post-scores on the ISVS for the Nurse and Social Work control and experimental groups.....	30

Using Clinical Supervision to Improve Interprofessional Collaboration

Chapter One

Introduction

Health care is ever evolving. In addition, recent legislative initiatives, like the Affordable Care Act and the Social Work Reinvestment Act, represent opportunities for academia to explore innovative approaches towards the preparation of future healthcare providers. Interprofessional collaboration (IPC) is noted as being important to the future of the health care system and key to improving patient outcomes (Reeves, Perrier, Goldman, Freeth, & Zwarenstein (2013). Interprofessional Collaboration (IPC) happens when multiple health workers from different professional backgrounds work together with patients, families, providers and communities to deliver the highest quality of care (Gilbert, Yan, & Hoffman, 2010). Marshall (2011) notes that “interprofessional collaborative practice promotes team identity, conserves energy by a unity in direction, and invites harmony of efforts” (p. 158).

The Commission on Collegiate Nursing Education (CCNE), one of the organizations that accredits schools of nursing, worked with other professional organizations to develop the Core Competencies for Interprofessional Practice (Interprofessional Education Collaborative, 2011). The field of nursing identifies Interprofessional Communication and Collaboration for Improving Patient Health Outcomes as standard number four in The Essentials of Baccalaureate Education for Professional Nursing Practice which guide undergraduate curriculum in nursing (American Association of Colleges of Nursing, 2015). The field of social work also places emphasis on interprofessional collaboration. The National Association of Social

Work (NASW) Code of Ethics, section 2.03, specifically discusses the importance of interdisciplinary collaboration (1999).

Historically, literature related to nursing's role in interprofessional collaboration focused on the nurse-doctor relationship; however, for IPC to improve healthcare outcomes, the focus of IPC needs to include other professionals involved in the care of the patient (Pollard, Ross, & Means, 2005). Pollard et al. (2005) noted separation between health and social care providers and that less senior staff and students were less likely to participate in IPC. Improving IPC is strongly influenced by the efforts of experienced nurse leaders to advocate for inclusive and active IPC (Pollard et al., 2005). Miers and Pollard (2009) interviewed 34 non-medical health and social care professionals in the United Kingdom and found that in general, participants felt that IPC was important and nurses in particular viewed themselves as playing a key role in the IPC process.

This project provided opportunities for nursing and social work students to use clinical supervision groups to explore their clinical experiences and expand their skills related to IPC. The conceptualization of clinical supervision varies (Cutcliffe & Lowe, 2005). For the purpose of this project, the clinical supervision groups were modeled after the Parameters of European Conceptualizations of Clinical Supervision (Cutcliffe, Butterworth, & Proctor, 2001 as cited in Cut & Lowe, 2005). This conceptualization provides a detailed list of what clinical supervision is, which includes: supportive, relationship based, challenging, safe, not managerial supervision, not personal therapy, reflective and occurs regularly (Cutcliffe & Lowe, 2005). The clinical supervision groups were facilitated by nursing and social work instructors who have experience running groups and can model IPC efforts for the students participating in the groups.

Dutton and Worsley (2009) highlight the role of educators in modeling IPC for students. Data illustrated the importance of educators' role modeling effective interprofessional skills.

Identified Problem

Currently, at NMU, there are limited opportunities in program curriculums of nursing students and social work students that promote the skills needed to engage in IPC. Interprofessional Education (IPE) occurs when two or more health professions study together, providing collaborative, safe, high-quality, accessible patient-centered care (Interprofessional Education Collaborative, 2011). The curriculums are designed as academic silos, which does not reflect the expectations for graduates entering the workforce. These curriculums can result in relational biases between graduates of different professions (Lapkin, Levett-Jones & Gilligan, 2013). IPE is a key step for facilitating IPC and improve healthcare outcomes (Reeves, 2016). IPE efforts vary across the globe Herath et al. (2017). Research suggests that IPE is more effective when undertaken-while students are in the process of establishing professional boundaries (Pollard & Miers, 2008). Pollard and Miers (2008) posited that the impacts of IPE carry on into the professional work environment. Pollard (2009) explored the experience of nursing students in the United Kingdom and found that opportunities to participate in interprofessional work were arbitrary and there was limited support for students to engage in IPC. Pfaff, Baxter, Jack and Ploeg (2013) suggest, based on an integrative review of literature, that lack of knowledge related to other professions and lack of effective communication skills were barriers to the engagement of new graduate nurses in IPC.

IPC is viewed as playing a key role in improving the quality and safety of health care (Gilbert, 2010). Lancaster, Kolakowsky-Hayner, Kovacich, & Greer-Williams (2015) found that communication is often limited between doctors, nurses and unlicensed assistive professionals when examining patient care. Pollard (2008) explored the impact of healthcare staff interactions on students in clinical agencies. Students often described interactions that represented less than optimal IPC.

Although conclusive evidence in the literature regarding effective IPE interventions is lacking, the following interventions are commonly used in IPE: patient scenarios/simulations, small group work focused on teamwork, online discussions, lectures and small group activities (Olson & Bialocerkowski, 2014). The uncertainty regarding what is considered best practice for IPE provides an opportunity to explore interventions not typically found in classrooms. Clinical supervision is a tool used in a variety of healthcare settings. Clouder and Sellars (2004) suggest that “clinical supervision has the potential to move beyond preserving the status quo to enhancing practice, the full potential of which might be recognized more readily in a groups supervision context or in an interprofessional setting” (p. 266).

In the winter 2015 semester, Melissa Copenhaver, Nursing Instructor, and Ann Crandell-Williams, Social Work Professor, initiated a pilot project to bring nursing students and social work students together to practice collaboration using patient case studies. The feedback from students overwhelmingly illustrated that although students found IPC challenging, the participants wanted more opportunities to engage in IPC with students from other disciplines. In addition, the feedback from students and faculty observations of the event illustrated that the students were unsure how to initiate the

process of collaborating on patient care. It was apparent that successful IPE would need a different approach in addition to or other than a onetime case study collaboration opportunity. Please see Figure 1 for a summary of this pilot project.

Event Summary					
April 14th, 2015 4-5:15pm					
Inter-Professional Collaboration Opportunity					
Attendance: 7 Social Work students, 7 Nursing students					
Planning: Planning of the event was collaboration between Melissa Copenhaver, Ann Crandell-Williams and two student coordinators. The students reviewed the proposed format and explored possible case studies for the most appropriate cases.					
Implementation: Students were randomly assigned to three groups so each group had SW and RN students. The groups explored the shared goals and values between the professions and explored an assigned case study. The groups developed a shared care plan for the patient(s) and reported off to the larger group.					
Feedback from experience:					
	1- strongly disagree	2- disagree	3- neutral	4- agree	5- strongly agree
1. It encouraged critical thinking.					13
2. It helped me gain a better understanding about the other profession.				1	12
3. It helped me understand how a team approach can improve patient outcomes				1	12
4. It allowed me to practice working in a team.			1		12
<p>1. What did you find most helpful about the process?</p> <p><i>Working with students from other professions and exploring the other perspective (11)</i></p> <p><i>Case study format was helpful (2)</i></p>					

2. What did you find least helpful about the process?

Use shorter case study/more time (2)

Being inside on a sunny day (1)

Would like list of resources (1)

Collaborating with a group with difference views on patient care (1)

Not as realistic as if in the situation/simulation (3)

Professional language barrier (2)

Example, like a video, of nurses and social workers collaborating prior to see how they do it. (1)

Trying to work on the same set of goals from the case study. It would have made sense if we could have done them separately and then come together to see how they are similar or different. (2)

Nothing (3)

3. What suggestions do you have for developing future opportunities?

Simulations with patients and collaborating (8)

Do throughout the semester and/or other semesters (2)

Include other professions (3)

Consider eliminating medium range goals (1)

Consider teams of two as each SW and RN student might have varying methods and goals (1)

Role plays (1)

Shadowing social workers (1)

Summary:

The opportunity was well received by the students with feedback suggesting they would like additional opportunities throughout the curriculums, perhaps incorporating simulation and other professions. Observations of the event suggested that professional roles in collaboration are unclear to many of the students. One nursing student commented “we’ve been in the hospital for how long and have never worked or even seen a social worker.”

Figure 1. Summary of Interprofessional collaboration pilot event undertaken in 2015

Theoretical Framework

In systematic reviews of theories in IPE/IPC, the importance of theory is evident; however no one theory formed a working consensus (Hall, Weaver, & Grassau, 2013; Olsen & Bialocerkowski, 2014). The literature suggests that learning theories play a role in IPE curriculum development (Craddock, O'Halloran, McPherson, Hean, & Hammick, 2013). Craddock et al. (2013) identified how behaviorism, cognitive constructivism and social constructivism can be applied to IPE efforts within a curriculum development context. Literature suggests that IPE curriculums are commonly developed in a top-down manner and curriculum are not based on theory (Craddock et al., 2013). Hean, O'Halloran, Craddock, Hammick, and Pitt (2013) illustrated how Wallis's (2008) framework for validation of theory supports the use of social capital theory, a non-learning theory, with IPE.

Although the intervention in this project was curriculum related, this project was primarily focused on the application of a clinical strategy, clinical supervision groups, to explore interprofessional socialization. Olson and Bialocerkowski (2014) felt that IPE efforts should focus on the process of professional socialization. As a result, social identify theory (SIT), originally conceptualized by Tajfel and Turner was utilized in this process (Burford, 2012; Pecukonis, 2014). This theory suggests individuals create a portion of their self-identify from their group affiliations. SIT emphasizes how the group is reflected in the individual rather than how the person acts within the group (Pecukonis, 2014). SIT identifies a group as three or more individuals who compare and contrast themselves in terms of shared attributes which distinguish them from other people (Burke, 2006). Individuals attempt to increase their self-image by emphasizing the

status of the group that they belong to and focusing on “us” and “them” (McLeod, 2008). SIT identifies four different types of social identity. 1. person-based social identity includes those characteristics that are internalized by the groups and become a part of the groups members’ self-concepts (Burke, 2006). 2. relational social identity that refers to the individual identifying themselves in relation to other specific group members (Burke, 2006). 3. group-based social identity, is consistent with the traditional view of social identity, like identifying with a particular professional label (Burke, 2006). 4. collective identity that suggests that beyond shared attributes, the groups engage in social activities that further solidify the group identity (Burke, 2006).

SIT additionally suggests the establishment of normative or comparative fit influences group interactions (Burford, 2012). A more normative fit within the group facilitates collaboration. In addition, SIT suggests that IPE efforts need to address relational bias issues like power, hierarchy, professional culture, professional roles and team interaction (Pecukonis, 2014). Engel, Prentice and Taplay (2017) further emphasize the importance of an approach that addresses the issue of power. They identified the recurrent theme of power differential in their study of IPE efforts with nursing and medical students, which was evident in the form of complicated knowledge and the power and silence of intimidation (Engel, et al. 2017). STI, as a theoretical foundation, address these issues to diminish the barriers to IPE.

Dutton and Worsley (2009) explored the role that educators play in promoting IPE and found that on a basic level, educators typically took a “dove” or a “hawk” role when it came to their attitudes regarding IPE. The “doves” appeared to be more accepting of the blurring of the professional lines that occurs with IPC and were better

able to manage conflict (Dutton & Worsley, 2009). “Hawks” were more concerned about professional erosion and sought ways to maintain existing boundaries (Dutton & Worsley, 2009). SIT provides a theoretical foundation supporting the tenuous balance of IPC and IPE efforts to facilitate collaboration without losing sight of the individual professional identities. Since professional identities and socialization continue to occur over time, on-going clinical supervision may provide groups with opportunities to explore professional boundaries and may promote development of normative fit.

Clinical supervision, with its application across different health professions, is one strategy, which within the context of SIT, may address the potential relational biases between professions. The biases that exist between professions hinder the outcomes that can occur from interprofessional collaboration. Although many methods have been proposed for interprofessional education, none of the current methods clearly address the need to maintain professional identities while allowing the needed blurring of professional boundaries to promote IPC and improved healthcare outcomes.

Chapter Two

Interprofessional Collaboration

Communication is an essential component to IPC; unfortunately, the literature suggests that healthcare professionals do not consistently engage in interprofessional communication. Lancaster et al. (2015) identified this lack of communication, especially between unlicensed assistive professionals and medical doctors, as a factor leading to fragmented care and errors. In a discussion paper, Stevenson, Seenan, Morlan, and Smith (2012) note a lack of evidence suggesting that IPE efforts lead to IPC and that expectations and perceptions related to the skills needed for IPE vary from country to country. The Sheffield Capability framework was recommended as a framework to guide expectations. The Sheffield Capability framework suggests that the:

Practicing professional should be able to: lead and participate in the interprofessional team, consistently communicate sensitively in a responsive and responsible manner, demonstrate effective interpersonal skills in the context of patient/client focused care, share uniprofessional knowledge with the team in ways that contribute to and enhance service provision. (Stevenson et al., 2012, p. 228)

In addition, professionals participating in interprofessional supervision training reported the process encouraged clearer communication and utilization of less professional specific jargon (Davys & Beddoe, 2008).

The importance of interprofessional collaboration was further underscored by Pollard, Miers, and Rickaby (2012) who interviewed 29 professionals, 19 of whom studied in programs with IPE and 10 of whom studied in traditional uniprofessional

programs. Data analysis suggested that programs that incorporate IPE better prepared the students for IPC as working professionals (Pollard et al., 2012). When planning IPE efforts in higher education, it is important that participants realize the importance of IPC once in practice (Pollard et al., 2012).

Hospice has a long history of using an interprofessional approach to the delivery of care through Interdisciplinary Teams (IDT). Hospice teams are commonly composed of physicians, clergy, nurses, social workers and homecare aides. Wittenberg-Lyles, Parker Oliver, Demiris, and Regehr (2010) explored the impact of the teams on collaboration. Findings suggest that a reflective process may be common within IDTs and this process provides an opportunity to reflect and share regarding workplace stress and unique patient/family situations (Wittenberg-Lyles, et al., 2010). Additionally, differences between perceived collaboration and enacted collaboration were evident, which is key to project implementation targeting IPC since the mechanism of data collection could be biased to measuring perceived collaboration rather than enacted collaboration (Wittenberg-Lyles, et al., 2010).

Interprofessional Education

Buring, et al. (2009) provide the following definition for IPE:

Interprofessional education involves educators and learners from 2 or more health professions and their foundational disciplines who jointly create and foster a collaborative learning environment. The goal of these efforts is to develop knowledge, skills and attitudes that result in interprofessional team behaviors and competence. Ideally, interprofessional education is incorporated throughout the entire curriculum in a vertically and horizontally integrated fashion (p. 2).

Poling, Wilson, Finke, Bokhart and Buchanan, (2016) utilized the Core Competencies for Interprofessional Collaborative Practice document to develop guidelines for interprofessional research. The guidelines reflect how the competencies can be applied to interprofessional education research. The guidelines emphasize working with professions with mutual respect and shared values, using knowledge of one's own role and the role of others, communicating in a responsive and responsible manner and utilizing relationship building values and principles to guide the actions of the research team (Poling et al., 2016). The intent of these competencies is to facilitate more robust research outcomes. These Interprofessional Collaboration Practice Guidelines reflect the process utilized in this project.

A recent project by Castrèn, Mäkinen, Nilsson and Lindström (2017) identified the potential value of interprofessional education. The study compared prehospital emergency care nursing students in Finland to prehospital emergency care nursing students in Sweden. Although the Swedish students scored higher in legislation in nursing and safety planning, the Finnish students scored higher on items related to interprofessional team work. In exploring the differences between the curriculums in the two countries, it was identified that the Finnish curriculum incorporates interprofessional education. The Swedish curriculum did not emphasize IPE.

Meleis (2016) reviewed the literature related to interprofessional education and summarized that barriers to establishing effective and equal teams continue due to educational and professional "silos". "Silos" occur when curriculums educate pre-professional students with limited interaction with other departments. Efforts to improve IPE are best undertaken as part of curriculum development which threads IPE throughout

the program rather than as individual education strategies within courses. Thistlethwaite suggests, “defined learning outcomes for IPE should harness the power of the interaction and should be attainable only through the interprofessional mix.” (2012, p. 62-63) Addy, Browne, Blake, and Bailey (2015) outlined the process undertaken at the University of South Carolina (USC) that started with the creation of a interprofessional education committee and resulted in IPE competency domains integrated across program curriculums. Addy et al (2015) found that student ratings of all IPE course items significantly increased after the curriculum implementation utilizing the IPE content.

Priddis and Wells (2011) used the multidiscipline approach incorporated into infant mental health to explore IPE models. The project brought a university school of psychology and a community health agency together with the intent of improving patient outcomes. Using infant mental health as the unifying model between the different professions, Priddis et al., (2011) were able to establish a common language to facilitate work with patients.

Lapkin, Levett-Jones, and Conor Gilligan (2013) completed a systematic review that suggested IPE enhances healthcare students' perceptions regarding IPE. The majority of the interventions used in the selected studies involved videos and other didactic methods. The authors noted that further research is needed to determine if IPE enhances communication and clinical skills.

O’Brien, McCallin, and Bassett (2013) explored the experience of students from a variety of health related fields participating in an interprofessional clinical experience. The Interprofessional Socialization and Valuing Scale (ISVS) was used to measure student response. There was no significant difference between the results based on the

future profession of the student (O'Brien et al., 2013). Eighty-nine percent of the students identified the interprofessional clinical experience as a positive experience (O'Brien et al., 2013). Wong, Wong, Chan, Chan, Ganotice, and Ho (2017) were able to report significant improvements in the knowledge level of nurses who participated in interprofessional team-based learning in Hong Kong.

Rosenfield, Oandasan, and Reeves (2011) utilized a qualitative approach to explore the perceptions of Canadian students regarding IPE. Overall, students expressed that IPE was a valuable component to their professional education. However, many students had negative perceptions regarding their first IPE experience because the experience included too many participants or scenarios that were not helpful in promoting collaboration (Rosenfield et al., 2011).

Wellmon, Gilin, Knauss, and Linn (2012) additionally found that students reported IPE as a positive experience. Using a variety of tools, The Interdisciplinary Education Perception Scale, Readiness for Interprofessional Learning Scale and The Attitudes Toward Healthcare Teams Scale, results of the inquiry demonstrated the authors' IPE intervention improved student attitudes towards IPE and IPC (Wellmon et al., 2012). The IPE intervention included a six-hour learning experience that included a case study with instructors from a variety of professions.

A systematic review of IPE in allied health, that included 17 studies, illustrated knowledge gaps related to theory and methods (Olson & Bialocerkowski, 2014). Evaluation of IPE in the literature has also focused on short-term evaluation so it is not clear if the impact of the IPE methods resulted in better IPC once in practice. Olson and Bialocerkowski (2014) identified the following IPE interventions: patient

scenarios/simulations, small group work focused on teamwork, online discussions, lectures and small-group activities. These authors called for a greater focus on inductive understanding of the factors associated with IPE and the process of “interprofessional socialization” (p. 244).

Kenaszchuk, Rykhoff, Collins, McPhail and Soeren (2011) focused on the methodology of other IPE studies to explore factors that impact the outcomes of IPE interventions. Kenaszchuk’s et al. (2011) intervention included a one half day workshop that consisted of a lecture regarding the importance of IPC and a case study completed in groups with a facilitator. Findings suggested that years of study within an educational curriculum positively impact the scores on the Interdisciplinary Education Perception Scale (IEPS) (Kenaszchuk et al., 2011).

Chan, Chi, Ching and Lam (2010) evaluated the impact of using problem-based learning with nursing and social work students. Similar to the United States, nursing and social work students in Hong Kong endure curriculums isolated from each other. Chan et al. (2010) used two three hour sessions of IPE and noted the following themes: (a) an increased awareness of each other’s professional values, (b) a recognition of each other’s disciplinary knowledge and (c) an appreciation for, and learning about each other’s roles for future collaboration (p. 170). Enhanced decision-making occurred because of the interprofessional interactions, which led to more comprehensive and patient-centered problem solving (Chan et al, 2010).

Dutton and Worsley (2009) explored attitudes of educators related to IPE and called for the importance of understanding the influence those attitudes have on students. As previously noted, the authors identified two main approaches: “doves” and “hawks”.

The authors suggest that given the complex nature of multi-disciplinary work, both approaches are valued and must be balanced to establish the collaborative approach across disciplines while not losing necessary professional boundaries and identity (Dutton & Worsley, 2009).

A comprehensive evaluation of IPE interventions continues to elude researchers. Conway (2009) focused on utility evaluation, which explores context, input, process and product. The IPE intervention included a clinical experience for students from nursing, medical, speech therapy, social work, nutrition and occupational therapy disciplines on a Multidisciplinary Learning Unit providing geriatric care. This systematic approach to evaluation highlighted some factors contributing to IPE success as well as factors hindering the success of the project subsequently allowing precise improvement as needed.

For 9 to 12 months Pollard and Miers (2008) followed two cohorts of professionals from educational preparation of health and social work. Analysis of the process suggested IPE efforts during the education process enhanced long term attitudes of IPE that are valuable to the IPC process (Pollard & Miers, 2008). Data additionally suggested that working professionals were more critical of their previous IPE experience than the participants were as students (Pollard & Miers, 2008).

IPE efforts often include interprofessional group work. Clarke, Miers, Pollard and Thomas (2007) studied five groups and found that level of participation was influenced by age, ethnicity, and gender. Additionally, perceived level of safety within the group contributed to the level of cohesion within the group. Surprisingly the educational component focused on IPC; however, only one experimental group worked

with students from other professions (Clarke et al., 2007). Five of the 15 groups felt that the interprofessional modules reinforced separations between professions (Clarke et al., 2007). Authors recommended that IPE efforts include gathering of demographic information, and previous knowledge and experience to guide facilitation of the groups and reinforcing of respect for diversity and open participation (Clarke et al., 2007).

Poling, Wilson, Finke, Bokhart & Buchanan (2016) found that accelerated nursing students reported higher levels of self-efficacy related to IPE than their traditional counterparts. Accelerated students often have more educational and work experience. These results reinforce the finding of Clarke et al., (2007) that demographic and previous knowledge plays a role in the development of IPC skills in students. IPE methods may need to be tailored based on the make-up of the group.

Clinical Supervision

Based on the feedback from the initial pilot project, clinical supervision was selected as the IPE intervention for this project. Clinical supervision is a part of clinical practice for many international healthcare providers, like nurses, social workers, occupational therapists and physiotherapists. Clinical supervision has been an element of professional practice in other countries for many years (Clouder & Sellers, 2004). Most approaches are profession specific and there is an accepted universal approach (Fitzpatrick, Smith, & Wilding, 2012). Dr. Edward White also expressed his concern regarding the lack of progress in implementation and publications in two separate editorials in 2017. He makes the case for clinical supervision as a means to address the increasing stress in health care work environments and improve the quality of care (White, 2017).

Pack (2012) posits that clinical supervision is one of the “main methods of becoming more aware of one’s own value base for practice.” (p. 163) The United Kingdom is a major source of literature related to clinical supervision (Wright, 2012); although Finnish researchers explored the cost effectiveness of clinical supervision prior to 2001 (Hyrkäs, Lehti, & Paunonen-Ilmonen, 2001). Literature suggests that definitions of clinical supervision vary. Additionally, reflective practice is commonly linked with clinical supervision although the processes are not synonymous (Wright, 2012). A review of this evidence reveals that the lack of consistent definition makes generalizations of findings challenging and research methods often lack randomization and data from individuals not participating in clinical supervision. The role of clinical supervision includes not only professional development but also surveillance which plays a role in ensuring accountability for the care patients receive (Clouder & Sellers, 2004). Lyth (2000) proposes the following definition for clinical supervision in her concept analysis:

Clinical supervision is a support mechanism for practicing professionals within which they can share clinical, organizational, developmental and emotional experiences with another professional in a secure, confidential environment in order to enhance knowledge and skills. This process will lead to an increased awareness of other concepts including accountability and reflective practice. (p. 728)

Häggman-Laitil., Elina, Riitta, Kirsi, and Leena (2007) proposed a model for clinical supervision that outlined prerequisites to the process. Such prerequisites include activities like nursing skills, holistic view of nursing curriculum and decision-making

skills. These prerequisites contribute to the content of clinical supervision: support of professional development, pedagogical competence, research and development activities and collaborative working (Häggman-Laitil et al, 2007). The process of clinical supervision is instrumental to the development of the nursing profession, as well as the student's professional, personal and career development (Häggman-Laitil et al, 2007). Häggman-Laitil et al.'s model (2007) additionally recognizes the impact of clinical supervision on the teacher or preceptor. The clinical supervision provider gains professional development by engaging in the process.

Clinical supervision is a process with a foundation in relationships. Geller and Foley (2009) posit that relationships are central to learning and that the supervisor-supervisee relationships goes through three stages. The role of the supervisor is to create a holding space that allows the supervisee to explore the internal and external aspects of their clinical work.

Butterworth, Bell, Jackson, and Pajnikihar, (2008) and Dilworth, Higgins, Parker, Kelly, and Turner (2013) completed systematic reviews regarding clinical supervision. Findings called for continued implementation and further research of clinical supervision with a greater focus on consistency and rigor. A systemic review presented evidence to further develop robust methods increasing the level of evidence to support clinical supervision (Dilworth et al., 2013). Bradshaw, Butterworth, and Mairs (2007) demonstrated that when students received clinical supervision, there was a slight improvement in the outcomes for their patients as compared to a control group, who did not receive clinical supervision.

McKellar and Graham (2017) attempt to identify the best practice approach to clinical supervision in midwifery. In Australia, the field of midwifery views clinical supervision as essential to ensure that students provide competent care. A review of the literature illustrated that a collaborative approach is needed with an emphasis on partnership and mentorship relationships.

Also in Australia, Fitzpatrick, Smith and Wilding (2012) conducted a literature review exploring the implementation of clinical supervision in allied health professions. Several themes emerged from the literature including that members of allied health professions teams can vary and collaboration among professionals may assist in defining effective supervision and operationalizing a unified supervision policy.

Rigby et al. (2012) explored clinical supervision methods utilized to assess which methods nursing students preferred. The authors explored students' reactions to face-to-face groups, virtual learning environment and a combination of face-to-face and virtual learning. Students felt that the combination method of face-to-face and virtual learning was most effective in meeting the diverse learning needs of students (Rigby et al., 2012). In addition, students involved in this study were able to identify the value of clinical supervision; in particular, as a means to process their individual clinical experience where many students reported feeling unsupported in their clinical placements (Rigby et al., 2012).

Pack (2012) explored the similarities and differences between the perceptions of clinical supervision among social work supervisors and supervisees. Although perceptions had similar themes, one key area of divergence was that supervisors saw supervision as a way to ensure safe care and supervisees focused on it being a safe place

to reflect upon individual work (Pack, 2012). Findings underscore the importance of considering perspectives of those involved in clinical supervision.

Not only is creating a common process for clinical supervision difficult, clinical supervision can lead to ethical dilemmas. Smith, Riva and Cornish (2012) highlight that the lack of consistency in clinical supervision means that increased emphasis needs to go into addressing potential areas of ethical concerns. In particular, Smith et al. (2012) felt that broad themes such as self-disclosure, client confidentiality, and existence of multiple relationships, were areas that need clarification at the initiation of clinical supervision to better address ethical concerns of all people involved.

Davys and Beddoe (2009) and Townend (2005) found that interprofessional clinical supervision group participants appreciated working in the interprofessional groups. The participants were able to develop a more diverse understanding of patient issues. Participants reported that the experience encouraged the use of clearer communication among professionals (Davys & Beddoe, 2009). In addition, participants felt that the perspectives group members shared were more open and diverse than if the groups had not been interprofessional (Davys & Beddoe, 2009). Cutcliffe and Lowe (2005) suggest that there is evidence that interprofessional clinical supervision relationships facilitate the shift from supervisor-led to supervisee-led supervision, which supports the balance of power between participant and supervisor that is conducive for the clinical supervision relationship to be both open and supportive.

Townend (2005) explored the use of interprofessional supervision in the United Kingdom and found that clinical supervision was a common practice in the mental health field. Only 15% of participants indicated that the fact that their supervision was from

another profession interfered with the clinical supervision process (Townend, 2005). Themes related to barriers to the process included differences in roles and training, absences of shared theories, language and empathy for organizational issues, anxiety and fear of revealing weaknesses (Townend, 2005). Themes related to benefits of interprofessional supervision include exposure to different perspectives, increased creativity, wider knowledge, and critical thinking (Townend, 2005). Bedward and Daniels (2005) found that both teachers and nurses reported experiencing decreased professional isolation with clinical supervision. Kenny and Allenby (2013) found that clinical supervision was helpful in decreasing professional isolation for nurses in rural Australia. Lietz (2008) suggested that the level of critical thinking in staff increased when supervisors used a clinical supervision approach.

Literature Review Summary

The topic of interprofessional collaboration is not a new concept in health care literature and more recently has been identified as a means to improve healthcare outcomes. However, there is a limited research that illustrates how or if it does affect patient outcomes. In addition, there is limited research that defines interprofessional education and best practices for implementation in higher education. The existing literature does not clearly support if interventions implemented in higher education carry through into the professional work environment. Clinical supervision is currently used more frequently outside of the United States and serves a purpose as part of quality practice. The majority of the studies related to clinical supervision are qualitative in nature and are unable to illustrate quantifiable outcomes. This project contributes to the

body of knowledge related to measurements of the impact of clinical supervision on interprofessional education and the skills needed for interprofessional collaboration.

Chapter Three

Methodology

Interprofessional education with nursing and social work students was explored using clinical supervision groups as a means to promote interprofessional education. A graduate student was selected to assist with implementing the research protocol under the guidance of the lead investigators. A graduate student was utilized to diminish the potential of perceived coercion of students to participate since the lead researchers were also faculty in the programs the students, who were the target of the research, were pursuing.

A novel IPE method like clinical supervision is best explored using a qualitative and quantitative approach. The two approaches allow for the results to be analyzed from two perspectives. The quantitative approach is a semi-experimental, quasi-experimental design. The comparison group was selected as part of the methodology to help differentiate if potential changes in the pre- and post-test scores of the ISVS were the result of the intervention or part of the developmental and learning process that occurs over a semester for students. The qualitative approach involved a survey completed by the experimental group.

Internal Review Board (IRB) application was approved (HS15-677) in June 2015 by Northern Michigan University's IRB (Appendix A). A non-probability convenience sample of nine to ten students from both nursing and social work participated in the project. Nursing students were selected from those enrolled in Nursing 401 Psychiatric and Mental Health Nursing and the Nursing 402 clinical based in the community. Social Work students enrolled in Social Work 474 Integrative Seminar II were offered the

opportunity to participate. These courses were selected because as part of the courses, students complete clinical hours in community mental health agencies. Emails were sent to eligible students and opportunities to receive information regarding the study and complete consent forms were offered. Participating students completed pre-tests to assess interprofessional skills at the start of winter 2016 semester and post-tests at the end of the semester. Additional students from both nursing and social work were offered the opportunity to complete the tools at the start of the semester and at the end as a comparison group. A small incentive, approved by IRB, was provided to students for completing the pre- and post-tests.

A literature review explored tools available to measure skills related to IPC/IPE. The available tools tend to measure perceived rather than enacted collaboration. Some tools are also specific to measuring IPC between nurses and doctors rather than being inclusive of other professionals (Kenaszchuk, Reeves, Nicholas & Zwarenstein, 2010). The tool that demonstrated the greatest level of reliability and validity, and has broad application across professions, was the Interprofessional Socialization and Valuing Scale (ISVS) (Appendix B). This tool fully meets the standards for instrument development (Oates & Davidson, 2015). The ISVS is a 32-item tool with a 7-point Likert scale. The tool has 3 subscales: ability to work with others, value in working with others, and comfort in working with others and an internal consistency using Cronbach's α for the 3 subscales of .79-.89 and .90 for the whole scale (King, Shaw, Orchard & Miller, 2010). The tool is intended to measure the degree in shifts in beliefs, behaviors, and attitudes that are foundational to interprofessional collaboration. Permission was obtained via email from Dr. King to employ the tool (Appendix C).

An interprofessional clinical supervision orientation was developed to provide a shared learning experience for students in the experimental group to process in a clinical supervision group. Once students understood the process and intent of clinical supervision, future clinical supervision groups focused on the current clinical experiences of the students. For the purpose of this study, clinical supervision is defined as an opportunity for healthcare staff, from various backgrounds, to reflect on their work with patients and families in a trusting and supportive environment that promotes growth (Butterworth, Bell, Jackson, & Pajnikihar, 2008). Groups of nine to ten students were co-facilitated by a nurse, who was also the primary investigator, and a social worker faculty member, both of whom have experience running groups. Facilitation of the group was performed by the nursing faculty member as part of her role as instructor of NU 402-Mental Health and Psychiatric Nursing. Berglund, Sjögren, and Ekebergh (2012) identified the value of having two faculty facilitated opportunities to combine theory and practice. The groups continued throughout the semester for five supervision group sessions. Based on recommendations by Conway (2009), group facilitators strived to model IPC in their interactions. At the conclusion of the semester, all students involved in the project completed post-tests to assess interprofessional skills. The students who participated in the clinical supervision groups also completed a qualitative questionnaire (Appendix D) developed to assess their experience.

Chapter Four

Implementation

In winter semester 2016, the proposed methodology was implemented with 34 students. Sixteen students made up the experimental group and 18 students made up the control group. Although the study was originally designed to include 20 students from nursing and 20 students from social work, only 17 students volunteered for the project from each major.

Students in the quasi-experimental control group completed the ISVS as a pre-test in January, 2016. Students in the experimental group also completed the ISVS as a pre-test and then viewed a prepared power point presentation that outlined both the definition and process of clinical supervision. Group discussion was utilized to establish group norms and outline the structure of the clinical supervision group for the remainder of the semester. Students selected to participate in either a clinical supervision session every other week at noon or at three o'clock on Thursdays.

Clinical supervision groups ran for 1.5 hours and were co-facilitated by a social work and nursing professor. At the first group session, students introduced themselves and identified to which agency they were assigned clinical related course work. The focus of the discussion was open to any issues or cases that the students encountered at their clinical sites. As the semester unfolded, if students were unable to attend their selected group, students were offered the opportunity to attend the alternate group. Students participating in the experimental clinical supervision groups and students in the comparison group completed the ISVS at the end of the semester. In addition, students in the clinical supervision group completed the qualitative data survey.

Group Demographics

Volunteers for the project included seven male and 27 female students. The mean age of all students who participated was 24 years. Eighty-eight percent of the students identified their race as Caucasian with one selecting Asian, one selecting Native American, and one selecting Other. Approximately 68 % of students who participated in the study listed the Upper Peninsula of Michigan as their permanent address and 32% reported their permanent address was outside of the Upper Peninsula. The average age was 25 years in experimental group (age range 21-36 years) and 29 years in control group (age range 21-32 years).

Quantitative Data Analysis

All collected quantitative data from the pre and post-tests were entered into SPSS. Missing data included two post-tests for the control group (1 from nursing and 1 from social work) and one pretest from a nursing student in the experimental group. Levene's test suggested the two groups were similar. A sample of 27 in the experimental group would have been needed to determine effect. The overall range of the scores on the ISVS (Appendix B) for the pre-test was 98-212 with a standard deviation of 28.3 and for the post-test the range was 162-235 with a standard deviation of 19.3. The experimental group had a mean pretest score of 170 and the control group had a mean pretest score of 182. The mean post-test score for the experimental group was 220 and the control group had a post-test score of 207 (Table 1). There was a 49 point increase in total score in the experimental group and a 25 point increase in the control group. This increase in scores suggests a higher level of change in knowledge and beliefs regarding interprofessional collaboration in the experimental group.

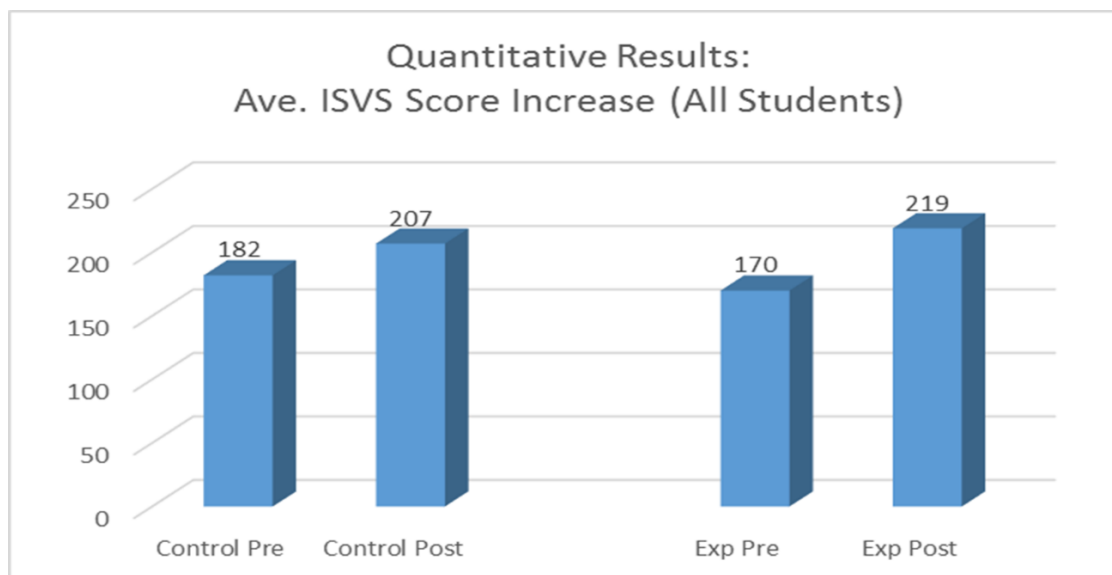


Figure 2. Comparison of the average pre- and post-scores on the ISVS for the control and experimental groups. Note: Increases in pre- and post-test scores of ISVS between control and experimental.

Analysis that examined the difference between nursing students and social work students identified that the average increase in the ISVS post-test for nursing students in the experimental group was 43 points and for social work students 63 points (Table 2). The nursing students in the control group had a 14 point increase in the ISVS and the social work control increase was 32 points. Although the sample size of 16 did not allow significance to be determined, the increase in the scores of those in the experimental group compared to the control group, suggests clinical supervision shows promise for interprofessional education (IPE).

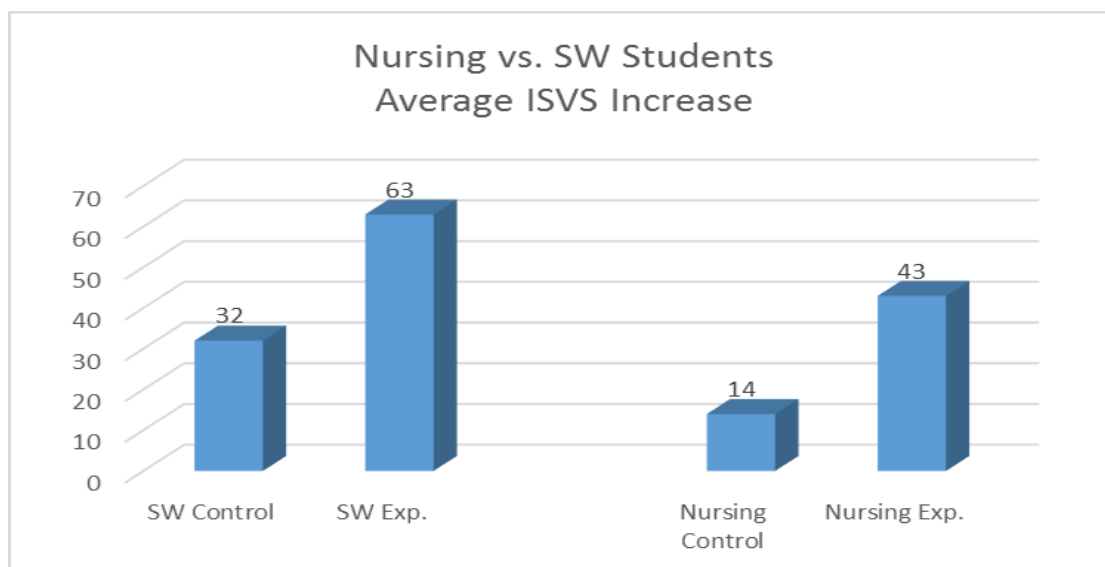


Figure 3. Comparison of the average pre- and post-scores on the ISVS for the Nurse and Social Work control and experimental groups. Note: Average increase in ISVS scores between Social Work and Nursing controls and experimental.

Qualitative Data Analysis

A qualitative survey (Appendix C) was developed for the experimental group to complete as part of the post-test data. Researchers did independent coding and used an iterative approach until the similar themes were identified. Nine students indicated the theme that clinical supervision groups were helpful because these groups allowed students to explore different perspectives. “Being part of a team with different viewpoints expanded my knowledge base and views of clients or situations” was noted by a student regarding what he or she found helpful about clinical supervision groups. Eight students reported the theme of valuing the opportunity to bring forth cases to explore and receive feedback. Three students reported a theme related to being able to share difficult experiences (“get things off their chest”). For example, a student stated

he/she valued “being able to talk out issues I would have been otherwise uncomfortable with and would have hindered my effectiveness...”

Students identified the following themes as interprofessional collaborative skills that they were able to improve: ability to see different perspectives (10 out of 16 students), ability to receive feedback (5 students), and ability to speak in groups (4 students) and feel like a member of a team (2 students). One main theme emerged for how students felt the experience would impact them in future interprofessional situations. There appeared to be an improved view of teamwork (7 students). Students noted that “I [now] will be very excited and motivated to be a part of an interprofessional team” and “It was refreshing to feel part of a team that wants you to succeed.”

In addition, the ability to see different perspectives (6 out of 16 students), be more open to other perspectives (6 students), improve communication skills with other professions (5 students), and increase skills for working with clients (2 students) were identified as skills students were able to improve through clinical supervision. One student also noted that he/she had a better understanding of his/her own professional role because of their participation in the clinical supervision groups.

Overall, the students’ responses were favorable regarding the clinical supervision experience. However, the following comments from students were elicited: A student did identify that there was difficulty in understanding the context of the individual agencies when the clinical supervision groups first started. Another student preferred that the group did not occur during what typically was clinical time, and one student wanted to discuss cases that are more controversial.

Discussion

It was anticipated that both groups would have some increase in their Interprofessional Socialization and Valuing Scale (ISVS) scores because of their ongoing clinical experiences where they would have opportunities to work with others. However, quantitative data illustrated that students in the clinical supervision groups had a greater degree of increase in their ISVS scores than the control. This increase in score suggests these students felt their skills related to working with others improved. The qualitative responses from the experimental group suggested that the students found the experience beneficial for a number of reasons. The recurrent themes identified in the qualitative data included being able to explore different perspectives, valuing exploring cases and receiving feedback, improving communication as part of a team and being able to talk about difficult situations. The similarities in the responses among nursing and social work students are additionally significant, given that such reliability suggests that both nursing and social work students have similar reactions to the experience. Many of the skills, such as giving and receiving feedback and developing a broader understanding of the patient, may serve to improve the quality and safety of care provided. Although unable to identify if statistically significant, the quantitative data suggests that clinical supervision could be a promising practice for improving interprofessional collaboration skills. In addition, this project represents interprofessional collaboration among faculty members. The foundation of interprofessional education is interprofessional collaboration by faculty. Greater emphasis on the importance of interprofessional collaboration is needed to further IPE in academia.

Implications for Practice

Analysis of data suggests that clinical supervision shows promise as a potential intervention to prepare undergraduate students for interprofessional practice. Using the ISVS to assess the use of interprofessional clinical supervision as an IPE method, allows better comparisons with other methods. This study also provides insight into the benefits of clinical supervision, which has eluded quantifiable benefits. Qualitative data illustrated the benefits the student gained from the experience such as improved ability to see different perspectives and improved communication skills. “I have begun viewing clients’ treatment more holistically” was noted by a participant. Being able to view patients in a holistic manner is an outcome strived for by many curriculums. The responses of the students suggest that students perceived the experience of inter-professional clinical supervision as beneficial.

Limitations

The involvement of two faculty known to the students may have influenced some bias in the responses of the participants. The sample size does not allow effect to be measured. The project site was also a small public university in the rural Upper Peninsula of Michigan so further research is needed to replicate findings. The initial design of this project did not assess the sustained impact of the clinical supervision groups. There is limited literature that looks at the long-term outcomes of IPE interventions. Due to limited follow-up data, a second IRB was submitted to allow for follow up data to be solicited from the original participants 6-12 months after the original project.

Conclusion

Interprofessional collaboration has the potential to improve patient outcomes; however, a best practice approach for teaching future healthcare professionals IPC skills has not emerged. This study suggests that clinical supervision has potential as an IPE intervention. Further studies need to be completed using larger samples to quantify the impact of clinical supervision on interprofessional education. Additional studies should also explore if the main positive impacts of interprofessional clinical supervision are sustained as the undergraduates join the workforce.

References

- Addy, C. L., Browne, T., Blake, E. W., & Bailey, J. (2015). Enhancing interprofessional education: Integrating public health and social work perspectives. *American Journal of Public Health, 105*, 106–8. <https://doi.org/10.2105/AJPH.2014.302502>
- American Nurses Association. (2015). The essentials of baccalaureate education for professional nursing practice. Retrieved from <http://www.aacnnursing.org/Portals/42/Publications/BaccEssentials08.pdf>
- Bedward, J., & Daniels, H. R. (2005). Collaborative solutions—clinical supervision and teacher support teams: Reducing professional isolation through effective peer support. *Learning in Health and Social Care, 4*(2), 53-66. <https://doi.org/10.1111/j.1473-6861.2005.00090.x>
- Berglund, M., Sjögren, R., & Ekebergh, M. (2012). Reflect and learn together—when two supervisors interact in the learning support process of nurse education. *Journal of Nursing Management, 20*(2), 152-158. <https://doi.org/10.1111/j.1365-2834.2011.01368.x>
- Bradshaw, T., Butterworth, A., & Mairs, H. (2007). Does structured clinical supervision during psychosocial intervention education enhance outcome for mental health nurses and the service users they work with? *Journal of Psychiatric & Mental Health Nursing, 14*(1), 4–12. <https://doi.org/10.1111/j.1365-2850.2007.01021.x>
- Burford, B. (2012). Group processes in medical education: Learning from social identity theory. *Medical Education, 46*(2), 143–152. <http://doi.org/10.1111/j.1365-2923.2011.04099.x>
- Buring, S. M., Bhushan, A., Broeseker, A., Conway, S., Duncan-Hewitt, W., Hansen, L., & Westberg, S. (2009). Interprofessional education: Definitions, student

- competencies, and guidelines for implementation. *American Journal of Pharmaceutical Education*, 73(4), 1-8. <https://doi.org/10.5688/aj730459>
- Burke, P. J. (2006). *Contemporary Social Psychological Theories*. Stanford, California: Stanford University Press.
- Butterworth, T., Bell, L., Jackson, C., & Pajnkihar, M. (2008). Wicked spell or magic bullet? A review of the clinical supervision literature 2001–2007. *Nurse Education Today*, 28(3), 264–272. <http://doi.org/10.1016/j.nedt.2007.05.004>
- Castrèn, M., Mäkinen, M., Nilsson, J., & Lindström, V. (2017). The effects of interprofessional education–Self-reported professional competence among prehospital emergency care nursing students on the point of graduation–A cross-sectional study. *International Emergency Nursing*. <https://doi.org/10.1016/j.ienj.2017.02.004>
- Chan, E. A., Chi, S. P. M., Ching, S., & Lam, S. K. (2010). Interprofessional education: The interface of nursing and social work. *Journal of Clinical Nursing*, 19(1-2), 168-176. <https://doi.org/10.1111/j.1365-2702.2009.02854.x>
- Clarke, B., Miers, M., Pollard, K., & Thomas, J. (2007). Complexities of learning together: Students' experience of face-to-face interprofessional groups. *Learning in Health & Social Care*, 6(4), 202–212. <https://doi.org/10.1111/j.1473-6861.2007.00162.x>
- Clouder, L., & Sellers, J. (2004). Reflective practice and clinical supervision: An interprofessional perspective. *Journal of Advanced Nursing*, 46(3), 262–269. <http://doi.org/10.1111/j.1365-2648.2004.02986.x>

- Conway, J. (2009). Implementing interprofessional learning in clinical education: Findings from a utility-led evaluation. *Contemporary Nurse*, 32(1-2), 187-200. <https://doi.org/10.5172/conu.32.1-2.187>
- Craddock, D., O'Halloran, C., McPherson, K., Hean, S., & Hammick, M. (2013). A top-down approach impedes the use of theory? Interprofessional educational leaders' approaches to curriculum development and the use of learning theory. *Journal of Interprofessional Care*, 27(1), 65–72. <http://doi.org/10.3109/13561820.2012.736888>
- Cutcliffe, J., & Lowe, L. (2005). A comparison of North American and European conceptualizations of clinical supervision. *Issues in Mental Health Nursing*, 26(5), 475–488. <https://doi.org/10.1080/01612840590931920>
- Davys, A., & Beddoe, L. (2009). Interprofessional learning for supervision: “Taking the blinkers off.” *Learning in Health & Social Care*, 8(1), 58–69. [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1473-6861](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1473-6861)
- Dilworth, S., Higgins, I., Parker, V., Kelly, B., & Turner, J. (2013). Finding a way forward: A literature review on the current debates around clinical supervision. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 45(1), 22–32. <http://doi.org/10.5172/conu.2013.45.1.22>
- Durkin, A. E., & Feinn, R. S. (2017). Traditional and Accelerated Baccalaureate Nursing Students' Self-Efficacy for Interprofessional Learning. *Nursing Education Perspectives*. 38(1), 23-28. <http://www.nln.org/newsroom/newsletters-and-journal/nursing-education-perspectives-journal>

- Engel, J., Prentice, D., & Taplay, K. (2017). A power experience: A phenomenological study of interprofessional education. *Journal of Professional Nursing*, 33(3), 204-211. <https://doi.org/10.1016/j.profnurs.2016.08.012>
- Fitzpatrick, S., Smith, M., & Wilding, C. (2012). Quality allied health clinical supervision policy in Australia: A literature review. *Australian Health Review*, 36(4), 461-465. <https://doi.org/10.1071/AH11053>
- Geller, E., & Foley, G. M. (2009). Broadening the “ports of entry” for speech-language pathologists: A relational and reflective model for clinical supervision. *American Journal of Speech-Language Pathology*, 18(1), 22-41. [https://doi.org/10.1044/1058-0360\(2008/07-0053\)](https://doi.org/10.1044/1058-0360(2008/07-0053))
- Gilbert, J. H., Yan, J., & Hoffman, S. J. (2010). A WHO report: framework for action on interprofessional education and collaborative practice. *Journal of Allied Health*, 39(3), 196-197. <http://www.asahp.org/journal-of-allied-health/>
- Häggman-Laitila, A., Elina, E., Riitta, M., Kirsi, S., & Leena, R. (2007). Nursing students in clinical practice—Developing a model for clinical supervision. *Nurse Education in Practice*, 7(6), 381-391. <https://doi.org/10.1016/j.nepr.2006.11.011>
- Hall, P., Weaver, L., & Grassau, P., A. (2013). Theories, relationships and interprofessionalism: Learning to weave. *Journal of Interprofessional Care*, 27(1), 73–80. <http://doi.org/10.3109/13561820.2012.736889>
- Hean, S., O’Halloran, C., Craddock, D., Hammick, M., & Pitt, R. (2013). Testing theory in interprofessional education: Social capital as a case study. *Journal of Interprofessional Care*, 27(1), 10–17. <http://doi.org/10.3109/13561820.2012.737381>

- Herath, C., Zhou, Y., Gan, Y., Nakandawire, N., Gong, Y., & Lu, Z. (2017). A comparative study of interprofessional education in global health care: A systematic review. *Medicine*, 96(38). <https://doi.org/10.1097/MD.00000000000007336>
- Hyrkäs, K., Lehti, K., & Paunonen-Ilmonen, M. (2001). Cost–benefit analysis of team supervision: The development of an innovative model and its application as a case study in one Finnish university hospital. *Journal of Nursing Management*, 9(5), 259-268. <https://doi.org/10.1046/j.1365-2834.2001.00254.x>
- Interprofessional Education Collaborative. (2011). *Core Competencies for Interprofessional Collaborative Practice*. Retrieved from <http://www.aacn.nche.edu/education-resources/ipecreport.pdf>
- Kenaszchuk, C., Reeves, S., Nicholas, D., & Zwarenstein, M. (2010). Validity and reliability of a multiple-group measurement scale for interprofessional collaboration. *BMC Health Services Research*, 10(1), 83. <https://doi.org/10.1186/1472-6963-10-83>
- Kenaszchuk, C., Rykhoff, M., Collins, L., McPhail, S., & Soeren, M. van. (2011). Positive and null effects of interprofessional education on attitudes toward interprofessional learning and collaboration. *Advances in Health Sciences Education*, 17(5), 651–669. <http://www.springer.com/education+%26+language/journal/10459>
- Kenny, A., & Allenby, A. (2013). Implementing clinical supervision for Australian rural nurses. *Nurse Education in Practice*, 13(3), 165-169. <http://doi.org/10.1007/s10459-011-9341-0>

- King, G., Shaw, L., Orchard, C. A., & Miller, S. (2010). The interprofessional socialization and valuing scale: A tool for evaluating the shift toward collaborative care approaches in health care settings. *Work (Reading, Mass.)*, 35(1), 77–85. <http://doi.org/10.3233/WOR-2010-0959>
- Lancaster, G., Kolakowsky-Hayner, S., Kovacich, J., & Greer-Williams, N. (2015). Interdisciplinary communication and collaboration among physicians, nurses, and unlicensed assistive personnel. *Journal of Nursing Scholarship*, 47(3), 275–284. <http://doi.org/10.1111/jnu.12130>
- Lapkin, S., Levett-Jones, T., & Gilligan, C. (2013). A systematic review of the effectiveness of interprofessional education in health professional programs. *Nurse Education Today*, 33(2), 90-102. <https://doi.org/10.1016/j.nedt.2011.11.006>
- Lietz, C. A. (2008). Implementation of group supervision in child welfare: Findings from Arizona's supervision circle project. *Child Welfare*, 87(6), 31. <https://www.childwelfare.gov/>
- Lyth, G. M. (2000). Clinical supervision: A concept analysis. *Journal of Advanced Nursing*, 31(3), 722-729. <https://doi.org/10.1046/j.1365-2648.2000.01329.x>
- Marshall, E. S. (Ed.). (2011). *Transformational leadership in nursing: From expert clinician to influential leader*. New York: Springer Publishing Company.
- McLeod, S. (2008). Social identity theory. *Simply Psychology*. <https://www.simplypsychology.org/>
- Meleis, A. (2016) Interprofessional education: A summary of reports and barriers to recommendations. *Journal of Nursing Scholarship*, 48(1), 106-112. <https://doi.org/10.1111/jnu.12184>

- Miers, M., & Pollard, K. (2009). The role of nurses in interprofessional health and social care teams. *Nursing Management - UK*, 15(9), 30–35. <https://doi.org/10.7748/nm2009.02.15.9.30.c6882>
- National Association of Social Workers. (1999). *Code of ethics of the National Association of Social Workers*. Washington, DC: NASW Press.
- O'Brien, D., McCallin, A., & Bassett, S. (2013). Student perceptions of an interprofessional clinical experience at a university clinic. *New Zealand Journal of Physiotherapy*, 41(3), 81–87. <https://pnz.org.nz/journal>
- Olson, R. & Bialocerkowski, A. (2014). Interprofessional education in allied health: A systematic review. *Medical Education*, 48(3), 236–246. <http://doi.org/10.1111/medu.12290>
- Pack, M. (2012). Two sides to every story: A phenomenological exploration of the meanings of clinical supervision from supervisee and supervisor perspectives. *Journal of Social Work Practice*, 26(2), 163-179. <https://doi.org/10.1080/02650533.2011.611302>
- Pecukonis, E. (2014). Interprofessional education: A theoretical orientation incorporating profession-centrism and social identity theory. *The Journal of Law, Medicine & Ethics*, 42(2_suppl), 60-64. <https://doi.org/10.1111/jlme.12189>
- Pecukonis, E., Doyle, O., & Bliss, D. L. (2008). Reducing barriers to interprofessional training: Promoting interprofessional cultural competence. *Journal of interprofessional care*, 22(4), 417-428. <https://doi.org/10.1080/13561820802190442>

- Poling, D. B., Wilson, M., Finke, L. K., Bokhart, G., & Buchanan, J. (2016). Interprofessional research guidelines for health care students. *Nursing Education Perspectives*, 37(6), 345-346. <http://www.nln.org/newsroom/newsletters-and-journal/nursing-education-perspectives-journal>
- Pollard, K. (2008). Non-formal learning and interprofessional collaboration in health and social care: The influence of the quality of staff interaction on student learning about collaborative behaviour in practice placements. *Learning in Health & Social Care*, 7(1), 12–26. <https://doi.org/10.1111/j.1473-6861.2008.00169.x>
- Pollard, K. (2009). Student engagement in interprofessional working in practice placement settings. *Journal of Clinical Nursing*, 18(20), 2846–2856. <http://doi.org/10.1111/j.1365-2702.2008.02608.x>
- Pollard, K., C., Miers, M., E., & Rickaby, C. (2012). “Oh why didn't I take more notice?” Professionals’ views and perceptions of pre-qualifying preparation for interprofessional working in practice. *Journal of Interprofessional Care*, 26(5), 355–361. <http://doi.org/10.3109/13561820.2012.689785>
- Pollard, K. & Miers, M. (2008). From students to professionals: Results of a longitudinal study of attitudes to pre-qualifying collaborative learning and working in health and social care in the United Kingdom. *Journal of Interprofessional Care*, 22(4), 399–416. <https://doi.org/10.1080/13561820802190483>
- Pollard, K. C., Ross, K., & Means, R. (2005). Nurse leadership, interprofessionalism and the modernization agenda. *British Journal of Nursing*, 14(6), 339–344. <https://doi.org/10.12968/bjon.2005.14.6.17805>

- Priddis, L. E. & Wells, G. (2011). Innovations in interprofessional education and collaboration in a West Australian community health organization. *Journal of Interprofessional Care*, 25(2), 154-155. <https://doi.org/10.3109/13561820.2010.486874>
- Reeves, S. (2016). Why we need interprofessional education to improve the delivery of safe and effective care. *Interface-Comunicação, Saúde, Educação*, 20(56), 185-197. <https://doi.org/10.1590/1807-57622014.0092>
- Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: Effects on professional practice and healthcare outcomes (update). *Cochrane Database of Systematic Reviews*, (3). <https://doi.org/10.1002/14651858.CD002213.pub3>
- Rigby, L., Wilson, I., Baker, J., Walton, T., Price, O., Dunne, K., & Keeley, P. (2012). The development and evaluation of a ‘blended’ enquiry based learning model for mental health nursing students: “Making your experience count”. *Nurse Education Today*, 32(3), 303-308. <https://doi.org/10.1016/j.nedt.2011.02.009>
- Rosenfield, D., Oandasan, I., & Reeves, S. (2011). Perceptions versus reality: A qualitative study of students’ expectations and experiences of interprofessional education. *Medical Education*, 45(5), 471–477. <http://doi.org/10.1111/j.1365-2923.2010.03883.x>
- Smith, R. D., Riva, M. T., & Cornish, J. E. (2012). The ethical practice of group supervision: A national survey. *Training & Education in Professional Psychology*, 6(4), 238-248 11p. doi:10.1037/a0030806

- Stevenson, K., Seenan, C., Morlan, G., & Smith, W. (2012). Preparing students to work effectively in interprofessional health and social care teams. *Quality in Primary Care*, 20(3), 227–230. <http://primarycare.imedpub.com/>
- Thistlethwaite, J. (2012). Interprofessional education: A review of context, learning and the research agenda. *Medical Education*, 46(1), 58-70. <https://doi.org/10.1111/j.1365-2923.2011.04143.x>
- Townend, M. (2005). Interprofessional supervision from the perspectives of both mental health nurses and other professionals in the field of cognitive behavioural psychotherapy. *Journal of Psychiatric & Mental Health Nursing*, 12(5), 582–588. <http://doi.org/10.1111/j.1365-2850.2005.00878.x>
- Wellmon, R., Gilin, B., Knauss, L., & Linn, M. I. (2012). Changes in student attitudes toward interprofessional learning and collaboration arising from a case-based educational experience. *Journal of Allied Health*, 41(1), 26-34. <http://www.asahp.org/journal-of-allied-health/>
- White, E. (2017a). Clinical supervision: Beyond the first flush. *Journal of Perioperative Practice*, 27(5), 95-96. <https://www.afpp.org.uk/books-journals/Journal-of-Perioperative-Practice>
- White, E. (2017b). Clinical supervision: Invisibility on the contemporary nursing and midwifery policy agenda. *Journal of advanced nursing*, 73(6), 1251-1254. <https://doi.org/10.1111/jan.12970>
- Wittenberg-Lyles, E., Parker Oliver, D., Demiris, G., & Regehr, K. (2010). Interdisciplinary collaboration in hospice team meetings. *Journal of Interprofessional Care*, 24(3), 264-273. <https://doi.org/10.3109/>

13561820903163421

Wong, A. K. C., Wong, F. K. Y., Chan, L. K., Chan, N., Ganotice, F. A., & Ho, J. (2017).

The effect of interprofessional team-based learning among nursing students: A quasi-experimental study. *Nurse Education Today*, *53*, 13-18. <https://doi.org/10.1016/j.nedt.2017.03.004>

Wright, J. (2012). Clinical supervision: A review of the evidence base. *Nursing Standard*, *27*(3), 44–49. <https://doi.org/10.7748/ns2012.09.27.3.44.c9298>

Appendix A

IRB Approval

Memorandum

TO: Melissa Copenhaver
School of Nursing

CC: Ann Crandell-Williams
School of Nursing

DATE: August 13, 2015

FROM: Brian Cherry, Ph.D.
Assistant Provost/IRB Administrator

SUBJECT: IRB Proposal HS15-677
IRB Approval Dates: 8/13/2015- 8/13/2016**
Proposed Project Dates: 9/1/2015-9/1/2016
"Using Clinical Supervision to Improve
Interprofessional
Collaboration"

The Institutional Review Board (IRB) has reviewed your proposal and has given it final approval. To maintain permission from the Federal government to use human subjects in research, certain reporting processes are required.

- A. You must include the statement "Approved by IRB: Project # HS15-677" on all research materials you distribute, as well as on any correspondence concerning this project.
- B. If a subject suffers an injury during research, or if there is an incident of non-compliance with IRB policies and procedures, you must take immediate action to assist the subject and notify the IRB chair (dereande@nmu.edu) and NMU's IRB administrator (bcherry@nmu.edu) within 48 hours. Additionally, you must complete an Unanticipated Problem or Adverse Event Form for Research Involving Human Subjects
- C. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant.
- D. If you find that modifications of methods or procedures are necessary, you must submit a Project Modification Form for Research

Involving Human Subjects before collecting data.

E. **If you complete your project within 12 months from the date of your approval notification, you must submit a Project Completion Form for Research Involving Human Subjects. If you do not complete your project within 12 months from the date of your approval notification, you must submit a Project Renewal Form for Research Involving Human Subjects. You may apply for a one-year project renewal up to four times.

NOTE: Failure to submit a Project Completion Form or Project Renewal Form within 12 months from the date of your approval notification will result in a suspension of Human Subjects Research privileges for all investigators listed on the application until the form is submitted and approved.

All forms can be found at the NMU Grants and Research website:
<http://www.nmu.edu/grantsandresearch/node/102>

aw
Amanda Wigand

Graduate Assistant, Grants and Contracts

Northern Michigan University

906-227-2437

	Extent		Extent					
At this point in time, based on my participation in interprofessional education activities and/or clinical practice...								
6. I am aware of my preconceived ideas when entering into team discussions	7	6	5	4	3	2	1	0
7. I have a better appreciation for using a common language across the health professionals in a team	7	6	5	4	3	2	1	0
8. I believe that interprofessional practice is not a waste of time	7	6	5	4	3	2	1	0
9. I have gained an enhanced awareness of my own role on a team	7	6	5	4	3	2	1	0
10. I am able to share and exchange ideas in a team discussion	7	6	5	4	3	2	1	0
11. I have gained an enhanced perception of myself as someone who engages in interprofessional practice	7	6	5	4	3	2	1	0
12. I feel comfortable being the leader in a team situation	7	6	5	4	3	2	1	0
13. I feel comfortable in speaking out within the team when others are not keeping the best interests of the client in mind	7	6	5	4	3	2	1	0

	To a Very Great Extent	To a Great Extent	To a Fairly Great Extent	To a Moderate Extent	To a Small Extent	To a Very Small Extent	Not at All	N/A
--	---------------------------------	-------------------------	-----------------------------------	----------------------------	-------------------------	---------------------------------	------------------	-----

At this point in time, based on my participation in interprofessional education activities and/or clinical practice...								
14. I believe that the best decisions are made when members openly share their views and ideas	7	6	5	4	3	2	1	0
15. I see myself as preferring to work on an interprofessional team	7	6	5	4	3	2	1	0
16. I feel comfortable in describing my professional role to another team member	7	6	5	4	3	2	1	0
17. I have a better appreciation for the value in sharing research evidence across different health professional disciplines in a team	7	6	5	4	3	2	1	0
18. I believe that it is important to work as a team	7	6	5	4	3	2	1	0
19. I am able to negotiate more openly with others within a team	7	6	5	4	3	2	1	0
20. I believe that interprofessional practice will give me the desire to remain in my profession	7	6	5	4	3	2	1	0

	To a Very Great Extent	To a Great Extent	To a Fairly Great Extent	To a Moderate Extent	To a Small Extent	To a Very Small Extent	Not at All	N/A
At this point in time, based on my participation in interprofessional education activities and/or clinical practice...								
21. I have gained an enhanced awareness of roles of other professionals on a team	7	6	5	4	3	2	1	0

22. I have gained an appreciation for the importance of having the client and family as members of a team	7	6	5	4	3	2	1	0
23. I feel comfortable in being accountable for the responsibilities I have taken on	7	6	5	4	3	2	1	0
24. I am comfortable engaging in shared decision making with clients	7	6	5	4	3	2	1	0
25. I feel comfortable in accepting responsibility delegated to me within a team	7	6	5	4	3	2	1	0
26. I have gained a better understanding of the client's involvement in decision making around their care	7	6	5	4	3	2	1	0
27. I feel comfortable clarifying misconceptions with other members of the team about the role of someone in my profession	7	6	5	4	3	2	1	0
28. I have gained greater appreciation of the importance of a team approach	7	6	5	4	3	2	1	0

	To a Very Great Extent	To a Great Extent	To a Fairly Great Extent	To a Moderate Extent	To a Small Extent	To a Very Small Extent	Not at All	N/A
At this point in time, based on my participation in interprofessional education activities and/or clinical practice...								
29. I feel able to act as a fully collaborative member of the team	7	6	5	4	3	2	1	0

30. I feel comfortable initiating discussions about sharing responsibility for client care	7	6	5	4	3	2	1	0
31. I believe that interprofessional practice is difficult to implement	7	6	5	4	3	2	1	0
32. I am comfortable in sharing decision making with other professionals on a team	7	6	5	4	3	2	1	0
33. I have gained more realistic expectations of other professionals on a team	7	6	5	4	3	2	1	0
34. I have gained an appreciation for the benefits in interprofessional team work	7	6	5	4	3	2	1	0

Please assist us in knowing information about you that will help in determining whether there are any relationships between previous experience/knowledge and interprofessional education.

A. Demographic Information

Gender: Male Female

Age: _____ years

Employment Status: Full Time Casual

Part Time Student, Year of Program: _____

Educational Preparation:

Certificate

Bachelor

Degree

Diploma

Master's

Degree

Practitioner Group (or Program of Study if you are a student):

Audiologist

Laboratory Technologist

Psychiatrist

Clinical Kinesiologist	Nursing: Registered Nurse	Physician (Medicine)
Clinical Psychologist	Nursing: Practical Nurse	Recreational Therapist
Dental Assistant	Occupational Therapist	Respiratory Therapist
Dentist	Paramedics	Social Worker
Dietary Aid	Personal Support Worker	Speech Language Pathologist
Dietician (Nutritionist)	Pharmacist	Spiritual/Pastoral Care
Imaging Technologist	Physical Therapist (Physiotherapist)	Therapy Assistant
		Other (please specify): _____

B. Experience

Years of practice experience (since achieving license to practice or completing formal training): _____

Years working on a team: _____

Years working with your current team: _____

Interprofessional Interest

For the next 3 questions, please select only ONE response for each question.

How important do you think Interprofessional Education is for later collaborative working relationships?

Very important	Not important
Important	Not important at all
Neutral	

How established is Interprofessional Education in your profession/agency?

Very established	Not established
Established	Not established at all
Neutral	

How involved do you think your profession/agency should be in interdisciplinary education and collaborative practice?

Very involved	Not involved
---------------	--------------

Involved

Not involved at all

Neutral

Thank you for taking the time to complete this instrument.

Appendix C

Interprofessional Socialization and Valuing Scale

Request Form

Please provide ALL the following information.

NOTE: Incomplete submissions will not be processed

I request permission to copy the Interprofessional Socialization and Valuing Scale (ISVS) as developed by Drs. Gillian King, Lynn Shaw and Carole Orchard (2007). Upon completion of the research, I will provide Dr. Gillian King with a brief summary of the results, including information related to the use of the ISVS in my study.

DATE: 12/21/15

NAME: Melissa Copenhaver

TITLE: Nursing Instructor

UNIVERSITY/ORGANIZATION: Northern Michigan University

ADDRESS: 1401 Presque Isle Ave Marquette, MI 49855

PHONE: 906-227-1193

E-MAIL: mcopenha@nmu.edu

DESCRIPTION OF STUDY (INCLUDING POPULATION)

The skills need to engage in IPC can be cultivated through interprofessional education (IPE) (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013). Currently, at NMU, there are limited opportunities included in the program curriculums of nursing students and social work students to promote the skills needed to engage in IPE. The curriculums are designed as silos, but that does not reflect the expectations of graduates when they graduate and join the workforce. This proposed project will provide opportunities for nursing and social work students to use clinical supervision groups to explore their clinical experiences and expand their skills related to IPC. Data will be gathered to identify outcomes related to the intervention. Based on the literature review completed for this project, clinical supervision, as an intervention, has not been fully explored as a methodology for IPE. Findings from this project could inform future efforts to promote IPE at NMU and other universities.

Permission is hereby granted to copy and use the Interprofessional Socialization and Valuing Scale (ISVS).

Date: 20 January 2016

A handwritten signature in black ink that reads "Gillian King". The signature is written in a cursive style with a large initial 'G' and a long, sweeping tail on the 'K'.

Signature:

Dr. Gillian King,

Senior Scientist

Bloorview Research Institute

150 Kilgour Road

Toronto, ON M4G 1R8

Phone: 416.425.6220 ext 3323

Fax: 416.425.1634

Email: gking27@uwo.ca

Thank you for your interest in our work. The instrument as well as a signed copy of this request form providing permission to copy and use the ISVS will be sent to you at the e-mail address provided.

Appendix D
Post Qualitative Survey

Number of sessions attended:

What did you find helpful by participating in the clinical supervision groups?

What did you find unhelpful by participating in the clinical supervision groups?

Do you feel your interprofessional collaboration skills improved?

If yes, how?

Do you feel this will impact how you react to interprofessional situations when you become a nurse or social worker?

If yes, how?