



Chapter 3 Methodology and Tips for IRB Submission!

Dr. David B. Ross, Associate Professor

Dr. Ashley Russom, NSU Institutional Review Board 2nd Vice
Chair and Lead FCE Representative

All Dissertations are Unique



Please note that the slides regarding Chapter 3 have some headings that other dissertations might have or not. This is based on the actual study and the philosophy of your specific dissertation chair, which we feel you should have many detailed conversations regarding your specific study. This presentation will illustrate some areas that are from the dissertations of the presenters. We welcome open dialogue.

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Chapter Three: Methodology

Aim of the Study

Pressure has increased for academic rigor and achievement in kindergarten through third grade classrooms. Along with this, changes in society, time, and attention to social-emotional learning has waned. Increasingly, educators and researchers are recognizing that deficiencies with SEL influence student behavior as well as their academic performance. This phenomenological study is proposed to explore the relationship between teacher awareness of and experiences with social-emotional skill development, integration of social-emotional skill development instruction, and the impacts on student behavior. The purpose of this chapter is to describe the research strategies used, research participants, data collection and analysis process, ethical considerations, and limitations.

Qualitative Research Approach

In order to research teacher perceptions and instruction of social-emotional skills, a phenomenological qualitative strategy was used for this study.

Phenomenological studies use anecdotal information in the form of personal experiences and interpretations of phenomena by research subjects as sources of information from which to draw conclusions

(Groenewald, 2004). After World War I, the German philosopher, Edmund Husserl began developing theories suggesting that how objects and events in the world appear to people is related to the experience and perspective of the individual (Groenewald, 2004).

Therefore, Husserl believed phenomena could be studied independent of the context in which they occur and that a person brings their own unique experiences and perspectives into each phenomena which shapes their understanding.

Participants

This study was conducted in a coastal New England school district, Dennis-Yarmouth Regional School District, which educates 3,071 students within four elementary schools, one middle school, and a high school. The area relies heavily on tourism and the resulting service industries for its economy. A high percentage of students in this school district are from families that are low income or do not speak English as a first language. The free and reduced lunch percentage for the district is 53 and the percentage of ELL students is 20.1, or 617 students. Many children who are raised in poverty are faced with social and emotional instability and associated risk factors that can often lead to poor school performance and behavioral challenges (Jenson, 2017).

Inclusion criteria. The researcher solicited volunteers to participate in the study from the three primary elementary schools in Dennis-Yarmouth Regional School District. This group of teachers ranged in age from twenty-three to seventy-one. There were 114 teachers working in the school district across the three schools. One hundred-nine of these teachers were female and 5 were male. All of these teachers were invited to participate in this study through a short informational session and invitation letters. The information sessions were held at each elementary building and lasted about 20 minutes long and then the invitation letters were put into the teacher mailboxes following the session. Each school secretary collected the letters when filled out by potential participants for the researcher to collect and later use for sampling.

Exclusion criteria. The researcher used some exclusion criteria when determining how to invite participants into the study. Teachers were only selected to participate in the study if they worked in grade levels kindergarten through third grade. The exclusion of fourth and fifth grade teachers was purposeful based on the difference of social and emotional development at those grade levels as well as the varied content standards. Pre-school teachers were also not included in this study because while they do focus on social and emotional learning, the academic rigor is not comparable to kindergarten through third grade. In addition to this, the teachers needed to be working as full-time classroom teachers. Specialized teachers, for example fine and practical arts teachers were not included in the study because the research focused on classroom instruction within the context of vertical academic standards.

Sample Strategy

As a phenomenological qualitative study, the participants in the study needed to have some experience with the subject of the study, namely social-emotional learning. Also, IPA research does not require generalizations about the data (Smith, Flower, & Larkin, 2009). Therefore, the researcher used a purposive non-probability sampling strategy. To conduct purposive sampling, sometimes called judgment sampling, a researcher selects participants based on their own determination of which potential participants are most fitting and appropriate to the study (Creswell, 2013; Glesne, 2016).

Data Collection Tools

The first data point for this study was collected by interviewing the six study participants. Interview protocols are very common tools used in qualitative research (Creswell, 2013). The use of open-ended questions when conducting qualitative research interviews is critical, according to Creswell (2013) as they give the participant the opportunity to share their honest thoughts and feedback relative to the study's central phenomenon. The researcher prepared an interview protocol design that included seven open-ended questions (see Appendix C). Creation of the interview questions was influenced by the researcher's literature review and, more specifically, the work of Vygotsky (1962), Jones and Bouffard (2012), Durlak and Weissberg (2010), Ashdown and Bernard (2012), and the findings presented in the 2013 Collaborative for Academic, Social and Emotional Learning guide (CASEL, 2013).

Procedures

After significant planning and preliminary research, the researcher obtained authorization for the study from officials from the researcher's university including the Institutional Review Board (IRB) and the Superintendent of Dennis-Yarmouth Regional School District (see Appendix F). Once the necessary approvals were in place, the researcher began the purposive sampling process. An invitation was sent out to all primary grade teachers at the three selected schools in the district for voluntary participation in the study. Twenty-one responses were received. The researcher then targeted six teachers with a variety of experiences, training, and background in social-emotional skill development as well as a range of years as an educator who would be most appropriate for the study.

Data Analysis



The researcher read the interview and observation transcripts numerous times while taking notes looking for phrases and key ideas, always keeping the central and secondary research questions in mind. Initial analysis of the interviews and observations were made line-by-line with tentative codes. Domain or taxonomic coding was used to first examine the data for the ways in which teachers approached social-emotional and academic learning (Glesne, 2016). Whenever there were unclear or confusing sections in the data, the researcher referred back to the digitally recorded material for clarification. The researcher noted specific patterns, elements, and themes that emerged as she coded the data. Coded data was then organized into a spreadsheet based on the themes and patterns that had been identified. The coding of the data offered a layer of analysis of classroom instruction into two broad domains – social-emotional and academic. The social-emotional category was then further broken down into the sub-categories; positive climate, teacher sensitivity, and student comfort based on how teachers were observed incorporating social-emotional learning into academic instructional time.

Ethical Considerations

Participation in this study was completely voluntary and participants had the ability to withdraw from the study at any time. The researcher approached the participants and populations of students being studied with sensitivity and respect in various ways including but not limited to (a) disclosing the purpose and processes of the study to participants, (b) informing and reminding the participants of their rights in writing and verbally throughout the course of the study, (c) not using deceptive or misleading practices, (d) adhering to strict confidentiality standards, (e) following ethical interview and observation practices, (f) explaining the role of the researcher, and (g) demonstrating respect for the research sites (Creswell, 2013). The researcher used a purposive, non-probability sampling strategy to select participants from the selected district.

Trustworthiness

Data validation was critical for the phenomenological qualitative study. Part of the validation process used by the researcher was having a panel of experts review and approve the interview protocol questions. This committee, made up of experts in the field, suggested revisions, which were implemented, and the protocol was then piloted to ensure validity. Member checking was used to check the interview transcripts for accuracy. Glesne (2016) suggests that member checking is a tool to verify the expression of participant's ideas, experiences, and beliefs during an interview. Interview data was triangulated with observation data and Office Discipline Referral forms.

Potential Research Bias

The researcher serves as an Early Learning Coach with a focus on social-emotional learning and behaviors at the schools where the study was conducted. Having worked in this capacity for many years, she has collaborated with the teacher participants and has background knowledge of their capacities with social-emotional learning.

Therefore, there was a potential for the researcher to approach the study with personal biases. To combat this, the researcher consistently reflected on her potential biases in an attempt to remain neutral and objective during the study. As part of this process, the researcher objectively took interview and observation notes.

Fortunately, the training the researcher has received as an instructional coach, as part of her administrator certification program, and during the CLASS certification program have given her ample practice remaining neutral when working with and observing teachers.

Potential Research Bias and Researcher's Role

After completing a STEM undergraduate degree as a SEAPIA student in the United States and as the researcher conducting this study, this researcher has had a great interest in the student success of underrepresented minorities, particularly females and AAPI/SEAPIA students, in STEM education. As a female Filipina American who has completed both undergraduate and graduate degrees in Civil/Environmental Engineering at two, large public universities in the Pacific Northwest, this researcher is currently instructing undergraduate physical science courses. This researcher grew up and currently resides in the city where the research sites are located. By conducting this study, the researcher hopes to learn from the insight of the study's participants in order to offer key strategies for future SEAPIA students in undergraduate STEM education in Washington State. In order to manage bias, this researcher treated all individuals respectfully and fairly, as well as recorded data accurately and objectively.

Confidentiality and Security

In order to ensure privacy and protect the welfare of participants, particular steps to ensure confidentiality and secure collected data were taken. All survey participants were given a pseudonym of SP_n ; SP represents a survey participant and n will range from 1 to 12. Interviewees were also given a pseudonym of IP_n : IP represents an interview participant and n will range from 1 to 6. Furthermore, all data, including the participants' real names and pseudonyms, scanned notes, and interview transcriptions, were stored in the researcher's personal password protected computer and a password protected, online cloud storage file hosting service. The researcher will have sole access to the protected computer and files saved in the online cloud storage. All files, notes, transcriptions, and data will be kept and protected for approximately three years.

Limitations

Limitations are potential disadvantages or weaknesses within the presented study and are restrictions in which the researcher has no control (Creswell, 2012). Identified limitations may also create a need for future research. The following is a summary of limitations of this study's chosen methodology and limitation of the study.

Limitations of design. Limitations of the chosen quantitative research approach for this study includes the sampling approach, the use of online software programs for participants to complete the survey, the use of closed-ended questions in the survey.

Delimitations

Delimitations are the set boundaries and parameters that establish the framework for this study. The following delimitations were established for this study:

1. The target populations for this study were SEAPIA students currently enrolled in a STEM undergraduate program in Washington State. The researcher chose to include only students with a student classification of sophomore, junior, or senior because those students have made progress within their STEM programs and would have a better understanding of the institutional, familial, and cultural factors that contributed to their student success and retention.

Chapter Summary

An explanatory sequential, mixed methods study approach was designed to meet this study's research questions and further the understanding of the factors that contribute to SEAPIA retention and academic success in college level STEM education. This chapter summarized the aim of the study; a priori power analysis; mixed methods research approach; participants and sample strategy; instruments and content validity; and procedures, including permissions, quantitative and qualitative data collection and analysis, and confidentiality and security. A summary of the ethical considerations, trustworthiness, and potential research bias were also included in this chapter.

Other Specific Sections

Worldview Approaches

- **Postpositivism.** The postpositivism worldview is linked with quantitative approaches.
- **Constructivism.** The constructivist worldview is linked with qualitative approaches.
- **Advocacy and participatory.** The advocacy and participatory worldview are more often than not linked to qualitative approaches rather than quantitative methods.
- **Pragmatism.** It was Charles S. Peirce, a scientist and logician, that first coined the term pragmatism during the late 1860s and early 1870s (Webb, 2012). Farjoun et al. (2015) indicated that organizational scholars have utilized pragmatism to study themes such as (a) *routines*, (b) *innovation and creativity*, (c) *institutional change*, (d) *ethics*, (e) *virtual work*, (f) *knowledge*, (g) *learning*, and (h) *organizational boundaries*, which covers the researchers topic.

Sensitivity Nature of the Study

- **History of developing sensitive research.** Researchers from Chicago were the first individuals to conduct social research on sensitive topics and more importantly, to give it credibility (Dickson-Swift et al., 2008). The sensitive topics that were studied included families, friendships as well as communities in which participants had to reveal private and personal information. Due to the social transformations in the 1960s and 1970s, there was an abundance of change that occurred in social research throughout the world. Examples of this include research programs that broadened their topics to those that were overlooked due to perceived sensitivity such as (a) domestic violence, (b) alcoholism, and (c) practicing safe sex (Dickson-Swift et al., 2008).

Sensitivity Nature of the Study

- **Sensitive research.** Due to the nature of the topic, the researcher does not have a setting for their study. The reasoning for this is due to the sensitive nature of the study, which pertains to employee's revealing their experiences about their leaders leadership style and how it affects them as workers as well as the climate of the organization. Dalton, Daily, and Wimbush (1997) mentioned that topics related to business ethics will have participants of the study either guard their responses or not respond accurately.

What is IRB?

- Institutional Review Board (IRB)
- IRB ensures
 - ethical and safe research is conducted at NSU.
 - federal regulations protecting human participants are followed.
 - the rights of participants are protected.
 - informed consent is given.
 - research does not place participants at unreasonable risk.

FCE IRB Representatives

- **Dr Ashley Russom (Lead FCE IRB Representative):**
russom@nova.edu
- Dr David Escobar: de186@nova.edu
- Dr Silvia Orta: ortas@nova.edu
- Dr Jennifer Reeves: jennreev@nova.edu
- Dr Gabriela Mendez: gmendez@nova.edu
- Dr Zandra Stino: stino@nova.edu
- Dr David Ross: daviross@nova.edu
- Dr Alex Edmonds: edmonds@nova.edu
- Dr Sidi Lakhdar: lakhdars@nova.edu
- Dr Jared Bucker: jared@nova.edu

Helpful Tips: Early On

- Early on in the dissertation process:
 - **Student should communicate with the study site regarding the research project AND the process for securing approval** in the dissertation process and communicate that process to the chair via ADRIANA.
 - Consider the population you will be working with (especially in terms of vulnerable populations)
 - What are vulnerable populations? Individuals who require special consideration or extra protection
 - Children and minorities
 - Prisoners
 - Cognitively impaired or physically ill
 - Consider the consenting and assenting procedures!
 - Be aware that local sites can take up to 3 months for review and approval so please be sure to include this in your timeline

Helpful Tips: Site Approval

- For the IRB submission, the student must upload a signed administrative letter giving permission to conduct their study at the study site
 - If the site requires our IRB approval first, documentation must be uploaded to support this (e.g., email, letter, or application stating as such)!
 - Please note that NSU IRB approval does not guarantee approval from your study site!
- **Please contact one of the FCE IRB Representatives with ANY questions or concerns!!! Please do not contact main campus as we have slightly different procedures.**

Helpful Tips: CITI Certification

- CITI certification is required for ALL students conducting research at NSU
- CITI certification is valid for 3 years, after which you must complete the refresher course
- The CITI certificate must be valid for the length of the student's study.
- If your CITI certification is set to expire within 3 months you MUST go ahead and complete the refresher course before your IRB documents can be reviewed.

- CITI Homepage

<http://www.citiprogram.org>

- CITI Assistance

<http://www.nova.edu/irb/training.html>

Helpful Tips: Consent Forms

- Specific forms for specific situations:
 - Archival, de-identified data (ONLY) – no consent form needed
 - Anonymous survey (ONLY) – Participation Letter
 - Adults actively involved in research – consent form
 - Children actively involved in research – parent consent form AND child assent form
 - Parental consent MUST be secured FIRST and parent must be given at least 24 hours to decide
 - Student is consented 2nd, but student still has right to decline
- At all times, participation in a research study is VOLUNTARY!!!
 - Participants can withdraw from the study AT ANY TIME!
- Students should NOT approach any participants until they have IRB approval!!

Helpful Tips: New IRB Submissions

ADRIANA

- FCE's dissertation tracking system
- Upon approval of your Proposal, you will upload your approved Proposal into the IRB progress section of ADRIANA.

IRB Manager

- NSU's electronic IRB submission system
- All IRB documents are submitted through IRB Manager with the exception of the Proposal
 - Note: Spanish-speaking students will continue to submit "paper" submissions via ADRIANA
- IRB Manager: <https://nova.my.irbmanager.com/>
- IRB Manager Instructions: <http://www.nova.edu/irb/irbmanager/index.html>

Helpful Tips: IRB Manager

- Be sure to complete the Researchers Qualification Form before beginning a New Protocol Submission xForm.
- Student MUST add the chair as a collaborator who can EDIT the IRB Manager form
- Chair is the co-investigator of the study AND the faculty advisor (but they only need to be added once as the faculty advisor)
- Be sure to upload scripts for any recruitment letters, emails, reminder emails, phone calls, etc.
- Be sure the information is consistent throughout IRB Manager and all documentation!

IRB Dissertation Café

- Every Tuesday 7-10pm EST
- Ashley Russom (or another IRB Rep) is available for individual questions and assistance!
- You are welcome to attend alone or WITH your dissertation chair!
- Come with questions or log in and work on your IRB documents while someone is there to assist with any questions or concerns
- **Join from PC, Mac, Linux, iOS or Android:**

<https://zoom.us/j/884830929>

Resources

- IRB Manager: <https://nova.my.irbmanager.com/>
- IRB Manager Instructions: <http://www.nova.edu/irb/irbmanager/index.html>
- FCE IRB Web page: <http://education.nova.edu/applied-research/irb-resources.html>
- Sample Documentation and Templates for consent forms, participation letters, and administration letters): <http://education.nova.edu/applied-research/irb-resources.html>
- NSU IRB Web page: <http://www.nova.edu/irb/>
- CITI Course: www.citiprogram.org

Questions?

- Dr. David B. Ross daviross@nova.edu
- Dr. Ashley Russom: russom@nova.edu

