Liberty University

School of Music

The Effects of Repertoire Selection and Classroom Configuration on the Middle School

Classroom Environment

A Dissertation Submitted to

the Faculty of the School of Music

in Candidacy for the Degree of

DME in Music Education

by

Bethany Davis

Lynchburg, VA

July 1, 2023

Abstract

This predictive correlational study examined the effects of classroom configuration and repertoire selection on student perspectives of the middle school choral classroom atmosphere. Despite the general understanding that repertoire affects the classroom atmosphere, how repertoire selection and classroom configuration affect student perspective is still being determined. Student perspectives are vital as they have a significant impact as educators endeavor to create a positive learning environment for choral students. This quantitative study applied a multiple linear regression to predict the results of the Short Test of Musical Preferences and the National School Improvement Partnership's Classroom Climate Questionnaire Upper Primary. This study aimed to understand student perspectives on classroom arrangement, repertoire selection, and classroom environment in the middle school choir classroom. The study was conducted in one public middle school choir classrooms in Northeast Georgia. It included 117 choral students in sixth, seventh, and eighth grades. The findings of this multiple regression analysis revealed a predictive relationship between classroom configuration, repertoire selection, and classroom atmosphere. The regression results showed that the results were statistically significant ($R^2 = .281$, $p = 0.034$) along with a large effect size (0.625), displaying that classroom configuration and repertoire selection impact students' perspectives on classroom atmosphere. This information is helpful for choir teachers as they aim to form a positive classroom environment for all students. Limitations and recommendations for future research are included.

Keywords: classroom arrangement, repertoire selection, choir classroom atmosphere, middle school choir, positive

Contents

List of Tables

List of Figures

Abbreviations

Classroom Climate Questionnaire (CCQ)

Classroom Climate Questionnaire Upper Primary (CCQ-UP)

Classroom Climate Questionnaire Secondary (CCQ-S)

Kaiser–Meyer–Olkin (KMO)

Non-Disclosure Agreement (NDA)

National School Improvement Partnership (NSIP)

Short Test of Musical Preferences (STOMP)

Short Test of Musical Preferences- Revised (STOMP-R)

Statistical Package for the Social Sciences (SPSS)

Variance Inflation Factor (VIF)

Chapter 1: Introduction

This quantitative, non-experimental predictive correlational study aims to evaluate students' perceptions of the middle school chorus classroom as influenced by classroom arrangement and repertoire selection. Chapter One provides the framework for this research by investigating the previous research on physical classroom configuration and repertoire selection in the middle school chorus and how it influences student perception. The current literature addresses a gap in the recent research regarding middle school students. The chapter continues by defining the purpose and significance of the study, followed by a statement on the research questions. The chapter concludes with critical definitions to assist the reader in better grasping the subject matter. It is valuable to discern if a positive learning environment and repertoire selection affect student perception of the middle school choir classroom.

Background

Current studies suggest that repertoire selection is of great importance to the middle school choir classroom and is one of the most significant decisions made by the director.[1] However, most research discusses repertoire selection as it relates to curriculum and standards rather than student perception of the choir classroom. Similarly, current research regarding classroom environment, specifically the physical arrangement, needs to be examined regarding student perception at the middle school level. Research states that the classroom environment is essential to student learning, but how it affects students' perceptions is still being determined.[2] According to Wentzel, researchers "suggest that models of motivation based on instructional

---

[1] Jocelyn W. Armes, "Backward Design and Repertoire Selection: Finding Full Expression," *Music Educators Journal* 106, no. 3 (2020): 58. https://doi.org/10.1177/0027432119893735.

[2] Ibid, 56.

variables be extended to include student perceptions."[3] Research should look at repertoire

selection and classroom environment concerning how to meet the needs of the middle school

students in the choir classroom.[4]

Historical

Student perception of the classroom environment is essential because it directly affects

student learning. Learning is more likely to occur at a deeper level of understanding if students

feel comfortable and safe. However, little research indicates the specific elements of the choir

classroom that create a welcoming atmosphere. Armes discussed repertoire selection in terms of

learning.[5] She states, "Selecting repertoire that aligns with the learning outcome is critical."[6] This

idea is accurate since the repertoire serves as the curriculum for a choir ensemble class. Armes

also points out that "repertoire selection is one of the most impactful responsibilities music

educators undertake, and the music an educator chooses for students to experience reveals

implicit and explicit philosophical values."[7] The philosophical values of the music educator

affect the learning and the student's perception of the classroom atmosphere. Shaw examines

repertoire selection from a slightly different angle by stating, "Repertoire serves as a prominent

vehicle for delivering the curriculum within choral classrooms, making teachers' repertoire-

---

[3] Kathryn R. Wentzel, "Student Motivation in Middle School: The Role of Perceived Pedagogical Caring." *Journal of Educational Psychology* 89, no. 3 (1997): 416.

[4] Helen Patrick, Avi Kaplan, and Allison M. Ryan, "Positive Classroom Motivational Environments: Convergence between Mastery Goal Structure and Classroom Social Climate," *Journal of Educational Psychology* 103 (2011): 378. doi:10.1037/a0023311.

[5] Armes, "Backwards Design," 56.

[6] Ibid., 57.

[7] Ibid., 54.

related decisions a source of message about musical value."[8] A significant portion of the current research on song choice in the choir classroom originates from the curriculum's repertoire rather than how it enhances the classroom environment for the students.

The physical classroom space is also crucial to student perception as it aids classroom management. Typically, research that includes the physical configuration of the classroom examines classroom management. According to Zoromski et al., "teachers responding appropriately to rule violations" is the best classroom management strategy above the physical setup of the classroom.[9] Berg and Cillessen explicitly examined the seating of students in the classroom. They stated, "One such practice that may greatly affect classroom peer relationships is the arrangement of classroom seating positions."[10] Albert agrees with this and advances further by stating, "Within a formal schooling environment, students must learn not only concepts belonging to explicitly defined areas of knowledge, but also classroom routines, appropriate forms of classroom participation, and acceptable interactions with peers and the teacher."[11] Classroom routines and arrangements significantly affect the classroom environment. Zoromski et al. and Albert completed their research with middle school students, while Berg and Cillessen included participants in fifth and sixth grades. Most research regarding the physical classroom involves elementary rather than middle school students.[12] Future research should consist of

---

[8] J.T. Shaw, *Culturally Responsive Choral Music Education: What Teachers Can Learn from Nine Students' Experiences in Three Choirs,* Routledge: V.R. Lind, & C. McKoy, 2019. 92. https://doi-org.ezproxy.liberty.edu/10.4324/9780429503900.

[9] Zoromski, Allison et al., "Middle School Teacher Perceptions and Use of Classroom Management Strategies and Associations with Student Behavior," *Journal of Emotional and Behavioral Disorders* 29, no. 4 (2020): 206. https://doi-org.ezproxy.liberty.edu/10.1177/1063426620957.

[10] Yvonne Berg and Antonious Cillessen, "Peer Status and Classroom Seating Arrangements: A Social Relations Analysis," *Journal of Experimental Child Psychology* 130, (2015): 20.

[11] Albert, Daniel J. "The Classroom Culture of a Middle School Music Technology Class." *International Journal of Music Education* 38, no. 3 (August 2020): 383. https://doi.org/10.1177/0255761419881483.

students at the middle school level to obtain a better understanding of how best to help this age group learn.

Sociological

It is unknown how repertoire selection and arrangement affect student perspectives of the middle school choir classroom, despite understanding that repertoire and classroom arrangement are essential to learning. Knowing this perspective would influence the decisions for classroom arrangement and repertoire selection as middle school choir directors could make more informed decisions to improve student learning. This study recovered the perspectives of middle school choir students. In recent literature, studies "indicate that the learning environment is essential in students' learning."[13] When students feel comfortable in the classroom, learning is more likely. According to Lizzio, Wilson, and Simmons, "elements of the learning environment which are under teacher control can, and do, positively influence both the way students approach their study and the learning outcomes they may achieve."[14] In the middle school choir classroom, it is essential that students feel comfortable and safe as they are sometimes the most vulnerable when they sing in front of the director and their peers. Choir directors should control as many physical classroom elements as possible to create a positive space for students to sing and grow in their musical knowledge.

Educator repertoire selection supports the classroom environment. Song choice should allow students to demonstrate their learning and confidence in the classroom. As one author put

---

[12] Zoromski, Allison et al., "Middle School Teacher Perceptions," 207.

[13] J. Cai, Wen, Q., Lombaerts, K. et al., "Assessing Students' Perceptions about Classroom Learning Environments: The New What Is Happening in this Class (NWIHIC) Instrument," *Learning Environ Res* 25, (2022): 602. https://doi-org.ezproxy.liberty.edu/10.1007/s10984-021-09383-w.

[14] Alf Lizzio, Keithia Wilson, and Roland Simons, "University Students' Perceptions of the Learning Environment and Academic Outcomes: Implications for Theory and Practice," *Studies in Higher Education* 27, (2002): 44, doi: 10.1080/03075070120099359.

it, "research on students' perceptions of the classroom climate has identified consistent and statistically significant associations of certain social dimensions with numerous adaptive student beliefs and behaviors."[15] Repertoire selection significantly impacts the classroom's social environment as it can positively influence the students if chosen appropriately.

Theoretical

Middle school choir directors would do well to focus on the physical classroom as it affects the overall classroom environment and the repertoire selection to achieve high engagement during the school year. According to Armes, "Classroom environments play an important role in students' motivation, engagement, and achievement at school."[16] Moos discussed the classroom learning environment in great detail. He rated classroom environments based on "three general environment dimensions: relationship, personal growth, and system maintenance and change."[17] Urie Bronfenbrenner also examined the physical setting and how it affected the development of children and teenagers. According to his ecological theory, the microsystem, which contains the student's immediate environment, affects the student the most during development.[18] The classroom and its physical features are a part of the microsystem.

Creating a positive learning environment in music classrooms has recently been a recurring theme in music education. According to the Teacher Keys Effectiveness System, a positive learning environment is "a well-managed, safe, and orderly environment conducive to

---

[15] Patrick, Kaplan, and Ryan, "Positive Classroom Motivational Environments," 370.

[16] Ibid., 367.

[17] Cai et al. "Assessing Students' Perceptions about Classroom Learning," 602.

[18] Urie Bronfenbrenner. *The Ecology of Human Development: Experiments by Nature and Design*. (Austin: Harvard University Press, 1979). 132.

learning and encourages respect for all."[19] According to Papageorgi and Stavrou, previous research suggests that "students perceive positive learning environments as inspirational."[20] A welcoming environment could positively affect students, teachers, and overall middle school choir classroom learning. "An effective learning environment provides the learner with a positive and productive experience."[21]

Many researchers examined how to choose repertoire for students. Lois Choksy emphasized the planning aspect of teaching, including song selection, to be a successful choir director.[22] Repertoire selection significantly affects music educators as it is essential for curricular goals. Music educator Brandon Moss said, "One of the most important facets of my job as a choir director is repertoire selection."[23] According to another music educator, Hopkins, "Selecting high-quality repertoire for our students to perform is a central component of our curricular planning and goals and one of our primary responsibilities."[24] As music educators, "we should inquire how teachers can create social environments in which students are more likely to develop their interests, enjoyment, and motivation."[25] This study examined student perception of

---

[19] "Teacher Keys, Standard 7," Positive Learning Environment, https://www.gadoe.org/School-Improvement/Teacher-and-Leader-Effectiveness/Pages/Teacher-Keys-Effectiveness-System.aspx.

[20] Ioulia Papageorgi and Natassa Economidou Stavrou, "Student Perceptions of the Classroom Environment, Student Characteristics, and Motivation for Music Lessons at Secondary School," *Musicae Scientiae: The Journal of the European Society for the Cognitive Sciences of Music,* (2021): 4.

[21] Ibid., 2.

[22] Harold L. Caldwell, "Review of the Kodály Context," *Music Educators Journal* 68, no. 2 (1981): 58. https://doi.org/10.2307/3395879.

[23] Brandon Moss, "The Art of Choosing Appropriate Repertoire," *The American Organist* 8, (2018): 43, https://go.openathens.net/redirector/liberty.edu?url=https://www-proquest-com.ezproxy.liberty.edu/magazines/art-choosing-appropriate-repertoire/docview/2092474118/se-2.

[24] Michael Hopkins, "Programming in the Zone: Repertoire Selection for the Large Ensemble," *Music Educators Journal* 99, no. 4 (2013): 69. https://doi.org/10.1177/0027432113480184.

[25] Papageorgi and Stavrou, "Student Perceptions," 15.

the learning environment of the middle school choir classroom as it relates to the selection of repertoire and the physical classroom configuration.

Statement of the Problem

A significant collection of literature about repertoire selection and classroom environment exists. However, the research is currently related to higher education and elementary academic achievement. The problem is that a gap in the literature persists in students' perspectives on repertoire selection and the physical classroom environment in the middle school choir classroom. Presently, the research discusses repertoire selection as it relates to standards in music education. Armes agrees that song choice is "an example of one of the most frequent curricular choices music educators make."[26] Current studies typically examine how the physical classroom setup affects classroom management. According to Berg and Antonious, "incorporating attention for the physical structure of the classroom... may provide valuable assistance to teachers for effective classroom management and the promotion of positive peer relationships."[27] However, the literature needs to adequately discuss how the linear combination of repertoire and physical classroom configuration affects middle school students' perception of the choir classroom. The research includes teachers' perspectives of the middle school choir classroom but needs the students' perspectives.[28] For this reason, an investigation of middle school students' perceptions warrants completion.

---

[26] Armes, "Backwards Design," 55.

[27] Yvonne Berg and Antonious Cillessen, "Peer Status and Classroom Seating Arrangements: A Social Relations Analysis," *Journal of Experimental Child Psychology* 130, (2015): 32.

[28] Elizabeth H. MacGregor, "Conceptualizing Musical Vulnerability," *Philosophy of Music Education Review* 30, no. 1 (Spring 2022): 26, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/conceptualizing-musical-vulnerability/docview/2644084107/se-2.

Statement of the Purpose

This quantitative research study design identifies how classroom arrangements and repertoire selection affect students' perception of the middle school choir classroom. According to Creswell and Creswell, a quantitative approach is best for studies that will be "testing objective theories by examining the relationship among variables."[29] Therefore, a quantitative methodology was appropriate for predicting the results of student surveys regarding student perspectives on physical classroom arrangement, repertoire selection, and classroom environment. The study design predicted the results of the student surveys concerning student perspectives. The quantitative approach was further suitable because the research questions and hypotheses suggest that physical classroom configuration and repertoire selection inform student perception in the welcoming environment of the middle school choir classroom.

The study incorporates a questionnaire comprising a Likert scale with established reliability and construct validity administered to middle school students. Alonso-Tapia and Ruiz-Diaz applied the Classroom Motivational Climate Survey (CMC) to predict teacher perception based on school climate.[30] Cai et al. administered a questionnaire based on one researcher's scheme for human environments entitled The New What is Happening in this Class Questionnaire (NWIHIC) to predict student perception of science classrooms.[31] Then, Aldridge et al. based their questionnaire on the NWIHIC entitled the Classroom Climate Questionnaire-Secondary (CCQ-S) to discover students' perceptions of the classroom.[32]

---

[29] John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (Los Angeles, CA: Sage Publications, Inc., 2018) 4.

[30] Alonso-Tapia and Ruiz-Diaz, "School Climate," 154.

[31] Cai et al. "Assessing Students' Perceptions about Classroom Learning," 601.

Surveys were sent to multiple middle school choir directors in the United States to determine similarities and differences in order to illustrate the repertoire selections and classroom arrangements. Work is needed because there currently needs to be research to determine if classroom arrangement and repertoire selection affect the student perspective of the middle school choir classroom. According to Cai et al., "there is a severe lack of research at the compulsory education stage."[33] The surveys were completed by sixth, seventh, and eighth-grade choir students in public schools throughout the Southeastern United States. Once students conducted the surveys, the researcher scored the responses to evaluate the research question.

<div align="center">Significance of the Study</div>

This study could benefit middle school choir directors by helping to guide their decisions to create a positive and welcoming environment for their students due to the unknown how classroom configuration and repertoire selection affect student perspective of the classroom. This project explores the intersection of the classroom arrangement and repertoire selection of middle school choir directors. This study will also encourage further research by others interested in the middle school choir classroom atmosphere by creating a process of choosing repertoire for current students and the best procedure to determine the appropriate physical arrangement of the classroom.

The physical classroom configuration and climate could significantly affect student perception as it is the student's first impression of the class before conversing with the teacher or

---

[32] Jill M., Aldridge, Paul E. Rijken, and Barry J. Fraser, "Improving Learning Environments through Whole-School Collaborative Action Research," *Learning Environments Research* 24, no. 2 (2021): 188, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/improving-learning-environments-through-whole/docview/2537863071/se-2.

[33] Cai et al. "Assessing Students' Perceptions about Classroom Learning," 602.

other students. Educators design the classroom configuration before any learning begins.

Typically, middle school students engage in the physical classroom during the open house. Once

classes start, students will connect the choir classroom to a place where they feel safe and

comfortable. The classroom should provide a physical location where students can participate.

According to Hartwig and Riek, creating a welcoming classroom is "important in that students

recognize the need for both teacher/director and student to work as a team."[34] The appropriate

configuration will communicate this sentiment to the students and help prepare them to work

with their peers and the director.

Previous research on repertoire selections in the middle school choir shows that it is of

the utmost importance as repertoire guides teaching and learning. Song choices, in the words of

one researcher, alter "students' perspectives of learning experiences" based on how students

consider the repertoire responsive to the current culture.[35] According to Shaw, students feel

valued in the classroom in which the song choice is relatable and represents the current

students.[36] Student perception may increase based on the educator's repertoire if students can

connect to the meaning of the songs and be successful in the performances.

Students exposed to multiple physical arrangements of the middle school choir classroom

may perceive the environment differently despite all other aspects remaining constant.

---

[34] Hartwig, Kay and Rowena Riek. "Choir in the Age of 'the Voice'." *Australian Journal of Music Education*, no. 3 (2015): 39, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/choir-age-voice/docview/1788570696/se-2.

[35] J.T. Shaw, *Culturally Responsive Choral Music Education*, 87.

[36] Ibid., 85.

Middle school students are most successful when the physical configuration of the classroom provides the boundaries necessary for learning and a climate conducive to the creative choral process.

<div align="center">Research Question</div>

This study sought to answer the following questions:

RQ1: How accurately can a linear combination of classroom configuration and teacher repertoire selection predict middle school choir student perception of classroom atmosphere?

H_0**1:** There is no significant predictive relationship between classroom configuration and teacher repertoire selection and middle school choir classroom atmosphere.

<div align="center">**Conceptual Framework**</div>

Repertoire selection and classroom configuration, as core concepts of this study, provide a critical examination of student perception of a welcoming classroom atmosphere. According to Ohio State University, a positive learning environment can "motivate students to learn" and help students feel a part of a "supportive community of learners."[37] Repertoire selection is one of the crucial roles of an ensemble educator as it provides an avenue to reach learning goals. Hedden states, "The act of choosing repertoire appears to be one of the most critical elements for the success of any ensemble."[38] Researchers discovered that repertoire selection is vital for the

---

[37] Google, https://teaching.resources.osu.edu/teaching-topics/shaping-positive-learning.

[38] Debra G. Hedden and Ashley D. Allen "Conductors' Literature Selection Practices for Community Children's Choirs in North America," *International Journal of Music Education* 37, no. 1 (2019): 4. https://doi.org/10.1177/0255761418787539.

curriculum from this study and others like it. However, it is currently unknown how song choice affects student perception of the choir classroom environment in middle school.

The classroom environment includes the physical classroom configuration and the overall atmosphere. Cai et al. describe a positive classroom environment as "student cohesiveness between the relationship between students and the extent to which students support each other."[39] This definition does not include the physical aspects of the classroom, which will be an element of this study. These researchers also define a positive environment, including teacher support, as "the extent to which students perceive that their teacher helps, relates to, and cares about them."[40] Alonso-Tapia and Ruiz-Diaz advance these definitions and state, "It is a known fact that the different components of classroom climate have important effects on students' behavior, engagement, and achievement."[41] The room's ambiance also affects the learning environment. For example, bare classrooms with fluorescent lighting do not feel welcoming compared to classrooms with some decorations on the walls and lamp lights.[42]

Physical classroom configuration is another core concept of this study that affects the climate of the classroom space. However, the current literature reflects classroom arrangement only as it relates to classroom management. The most common classroom arrangements in the middle school choir classroom are chairs or risers. Some rooms have built-in risers on the floor with chairs, while other classrooms have transportable risers on a flat base. If the choir classroom

---

[39] J. Cai, Wen, Q., Lombaerts, K. *et al,* "Assessing Students' Perceptions," 603.

[40] Ibid., 607.

[41] Alonso-Tapia and Ruiz-Diaz, "School Climate," 151.

[42] Alana Pulay and Amy Williamson, "A Case Study Comparing the Influence of LED and Fluorescent Lighting on Early Childhood Student Engagement in a Classroom Setting," *Learning Environments Research* 22, no. 1 (2019): 14, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/case-study-comparing-influence-led-fluorescent/docview/1993519031/se-2.

has chairs instead of risers, they are usually in rows and possibly in sections within the rows, depending on teacher preference. How these physical configurations predict student perception in the middle school choir classroom is unknown.

Definition of Terms

1. **Classroom Environment**: "A fundamental condition for the development of human beings."[43]

2. **The Classroom Climate** Questionnaire- Secondary (CCQ-S): "11 scales based on existing learning environment scales that previously have been extensively validated."[44]

3. **Positive Learning Environment**: "A well-managed, safe, and orderly environment that is conducive to learning and encourages respect for all."[45]

4. **Short Test of Musical Preferences Test-Revised (STOMP-R)**: "Measures liking for musical genres on a 7-point Likert-type scale from 1 (not at all) to 7 (a great deal).[46]

5. **Repertoire selection**: "The music an educator chooses for students to experience."[47]

Summary

Two specific elements appear to relate to classroom engagement and the overall effectiveness of the middle school choir classroom: repertoire selection and classroom configuration. This study aims to evaluate students' perceptions of the middle school chorus

---

[43] J. Cai, Wen, Q., Lombaerts, K. *et al,* "Assessing Students' Perceptions," 601.

[44] Aldridge, Rijken, and Fraser, "Improving Learning Environments," 187.

[45] "Teacher Keys, Standard 7," Positive Learning Environment, https://www.gadoe.org/School-Improvement/Teacher-and-Leader-Effectiveness/Pages/Teacher-Keys-Effectiveness-System.aspx.

[46] S. P., Devenport and North, A. C., "Predicting Musical Taste: Relationships with Personality Aspects and Political Orientation," *Psychology of Music* 47, (2019). 837. https://doi.org/10.1177/0305735619864647.

[47] Armes, "Backwards Design," 54.

classroom as influenced by the classroom environment, precisely the linear combination of physical configuration and repertoire selection. Chapter One began the research by investigating the previous studies on physical classroom configuration and repertoire selection in the middle school chorus. The literature does not address the connection between the classroom configuration and the teacher's repertoire selection. The researcher needed more information regarding how these aspects influence student perception. Therefore, research included middle school student perception of the classroom environment.[48]

---

[48] Patrick, Kaplan, and Ryan, "Positive Classroom Motivational Environments," 378.

Chapter Two: Literature Review

Overview

This quantitative non-experimental predictive correlational study aimed to evaluate students' perceptions of the middle school chorus classroom as influenced by classroom configuration and repertoire selection. Music teachers who work with middle school choir students understand the need for an organized physical classroom as it relates to classroom management and choosing repertoire based on curriculum needs and learning goals, yet rarely consider these aspects as it relates to student perception. Analyzing the experiences through surveys could help to identify how repertoire selection and classroom configuration impact teachers' decisions.

The researcher conducted a systematic review of the literature to examine student perception of the learning environment of the middle school choir classroom as it relates to the selection of repertoire and the physical classroom configuration. This chapter provides a review of the literature on the topic of study. The study evaluated students' perceptions of the middle school chorus classroom as influenced by the classroom environment, precisely the physical configuration and repertoire selection. The researcher discussed theories regarding classroom environment and repertoire in the first section. The following areas incorporate the recent literature appropriate to classroom configuration in the middle school choir, repertoire selection for the middle school choir, and characteristics of a welcoming classroom environment. The chapter culminates with an objective analysis of how these factors relate to student perception and the potential implication of the findings of this study in closing this gap in the literature.

Theoretical Framework

The theoretical framework synthesizes a review of the appropriate classroom environment and repertoire selection philosophies. Rudolph Moos created a framework for evaluating educational settings based on the following four major components: the physical configuration, organizational elements, the human portion, and the social climate. [49] The work of Zoltan Kodály specifically examines aspects of creating an environment for musical learning based on his philosophy of music education. Additionally, Urie Bronfenbrenner constructed an ecological theory based on microsystems to explain how the classroom environment affects learning. These theories guided the design and analysis of the research.

Biological Systems Theory

The ecological systems theory created by Urie Bronfenbrenner is a model that postulates that "the embedded mechanisms and dynamic relationships between teachers, students, their schools, and social contexts drive development." [50] Bronfenbrenner is well-known for his writings about the ecology of human development.[51] This theory examines the idea that, to quote one researcher, "supportive classroom environments are associated with improved student

---

[49] Rudolph Moos, *Evaluating Educational Environments*, (San Francisco: Jossey-Bass Publishers, 1979), 6.

[50] Christina Cipriano, et al., "A Multilevel Approach to Understanding Student and Teacher Perceptions of Classroom Support during Early Adolescence," *Learning Environments Research* 22, no. 2 (2019): 211, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/multilevel-approach-understanding-student-teacher/docview/2104460457/se-2.

[51] Jonathan R. H. Tudge et al., "The Promise and The Practice of Early Childhood Educare in the Writings of Urie Bronfenbrenner," *Early Child Development and Care,* no. 191, (2021): 1079, doi:10.1080/03004430.2020.1844193.

outcomes, particularly during early adolescence." [52] Bronfenbrenner went through three phases

of this theory, beginning in the 1970s and ending with his death in 2005.[53]

The theory introduced a child's ecology in phase one and included two components. The

first layer had people engaging with a child in their immediate surroundings physically or

socially. The second component included a broader idea of these surroundings, such as the

"social systems which affect what can occur in the immediate setting." [54] Based on phase one, he

published these ideas and findings in his book *The Ecology of Human Development* in 1979. The

theory also pointed out how the child impacts the environment, both immediate and further

reaching. This phase concentrated on the context aspect, including the microsystem,

mesosystem, ecosystem, and macrosystem.[55] Throughout these four layers, the main idea is that

there is a direct relationship between children and their environments. [56]

The theory, after its initial introduction, was officially named the ecological systems

theory during phase two and focused on the research model of Process-Person-Context. [57] Phase

two centered on children's engagement as they interact with those adults who care for them, such

as parents, other family members, and teachers. Bronfenbrenner specifically mentioned that

children in the classroom do not hold a passive role but are active participants in their growth

and development. [58] The ecological systems theory permitted researchers to look more in-depth

---

[52] Christina Cipriano, et al., "A Multilevel Approach to Understanding," 209.

[53] Rudolph Moos, *Evaluating Educational Environments*, (San Francisco: Jossey-Bass Publishers, 1979), 8.

[54] Jonathan R. H. Tudge et al., "The Promise and The Practice of Early Childhood Educare," 1080.

[55] Ibid., 1081.

[56] Ibid.

[57] Ibid., 1082.

[58] Christina Cipriano, et al., "A Multilevel Approach to Understanding," 212.

at the school level within the microsystem of the school and other groups directly related.[59]

During the final phase of the theory, Bronfenbrenner adjusted the title and called it the

bioecological systems theory to emphasize the growing and developing child.[60] He also added

the concept of proximal processes to the interactions component. Proximal processes are typical

daily activities and the relationship between the child and their environment.[61] Teachers

stimulate these processes by ensuring connections between the child or student and the

immediate environment. However, personal characteristics have a significant effect as well.[62]

    Educators can learn a great deal from Bronfenbrenner's theory on creating a positive

learning environment in the classroom. Teachers and students develop a relationship within the

classroom throughout the school year, and these relationships can help students achieve

academic participation during class.[63] According to Bronfenbrenner, another essential element is

the relationship between the school and the student's home life.[64] The primary way to achieve

this goal is for the teachers to reach out and have a meaningful relationship with their student's

parents. Teachers who foster a positive relationship provide a way to guide the student to success

in all areas of life. The biological systems theory can help teachers and parents create a positive

learning environment.

---

[59] Christina Cipriano, et al., "A Multilevel Approach to Understanding," 212.

[60] Jonathan R. H. Tudge et al., "The Promise and The Practice of Early Childhood Educare," 1084.

[61] Ibid.

[62] Ibid., 1085.

[63] Maaike C. Engels et al., "The Role of Affective Teacher-Student Relationships in Adolescents' School Engagement and Achievement Trajectories," *Learning and Instruction* 75 (2021): 1, https://doi.org/10.1016/j.learninstruc.2021.101485.

[64] Jonathan R. H. Tudge et al., "The Promise and The Practice of Early Childhood Educare," 1083.

Social Climate Theory

Rudolf Moos developed the social climate theory to explain how social interactions affect individuals within a specific social context. [65] He began his work with the social climate theory in the 1970s by investigating classrooms and expanded his efforts to other environments like juvenile psychological facilities until 2003. The social climate theory focuses on three significant perceptions. The first is how the setting affects the perceptions of social relationships in the environment, the second is how the individuals perceive teachers' support in their learning, and the third is how the individuals perceive the maintenance of standards and procedures in the environment. [66] The social climate theory in the juvenile treatment facilities proved that the climate affected how well the individuals recovered and how quickly they could leave the facilities. [67] The environment of the rooms and facilities impacted how individuals perceived the recovery process. It also influenced how likely they were to ask for help and their interactions with peers and leaders. [68] Individuals who perceived a positive environment tended to ask for help and have a successful experience, while those who perceived the environment as hostile and disorderly did not. [69]

The information gathered in these environments provided the path for Moos to create the Classroom Environment Scale (CES) to apply the social climate theory to schools and the classroom. [70] After several studies, Moos discovered in the classroom environment that structure

---

[65] Moos, *Evaluating Educational Environments,* 13.

[66] Ibid., 68.

[67] Ibid., 78.

[68] Smalley, "Social Climate," 446.

[69] Ibid., 450.

[70] Wolf, "Learning Environment," 323.

and clear expectations are directly related to student and teacher success.[71] Individuals will

succeed more in an environment where expectations are clear and chaos is absent. A classroom

setting that is out of control is not an effective learning environment for students or a positive

experience for anyone involved. [72] The classroom social climate determines how students learn

and the depth at which they know. It also influences how the class interacts with one another and

students' behavior.[73] Moos indicated that students' perception of the social environment could

also impact the learning and interactions of students.[74] Future research must thoroughly

understand how classroom environments affect student behavior and learning. [75]

Teachers can apply the ideas conveyed in the social climate theory to create a positive

learning environment in the classroom. According to Moos, educators and classmates are located

in the immediate social environment of students, called the microsystem.[76] Therefore, they

directly affect student comfort and ability to learn.[77] Teachers can provide students with an

environment conducive to learning and maturing by creating a welcoming physical space and

social atmosphere. Educators must work diligently to create a classroom culture in which

students are comfortable expressing themselves, and those who organize a positive atmosphere

---

[71] Moos, "Junior High", 62.

[72] Ibid., 63.

[73] Joe, "Classroom Social Climate," 134.

[74] Roy T. Smalley and Sarah Hopkins, "Social Climate," 459.

[75] Moos, "Junior High," 64.

[76] Moos, *Evaluating Educational Environments*, 107.

[77] Maaike C. Engels et al., "The Role of Affective Teacher-Student Relationships in Adolescents' School Engagement and Achievement Trajectories," *Learning and Instruction* 75 (2021): 1, https://doi.org/10.1016/j.learninstruc.2021.101485.

provide a possibility for the extreme climates to be beneficial too.[78] The social climate theory can help teachers and parents create a positive environment in the classroom.

Musical Learning Environment

Zoltan Kodály constructed a way to teach music in Hungary in the mid-1900s, and it soon became a popular approach in the United States.[79] He believed that music is not just making sounds but is an engaging process that could promote a sense of happiness in students.[80] The following are the basic principles of the Kodály approach; music is the right of everyone; music education should begin with singing; music training should start in kindergarten or sooner, if possible; musical knowledge should begin with songs in the student's native language; and teachers should only include music of high quality.[81] These qualities aid music teachers in creating a welcoming environment for students. DeVries states that including repertoire students can relate to in their language generates a positive classroom atmosphere.[82] Kodály thought that choosing repertoire from the current students' lifestyle and home environment helps students feel safe in the classroom.[83]

---

[78] Sickle, "Relationships: Their Power and Importance," 67.

[79] Jean Sinor, "The Ideas of Kodály in America," *Music Educators Journal* 83, no. 5 (1997): 37. doi:10.2307/3399007.

[80] Dawn Joseph, "Fostering a Happy Positive Learning Environment for Generalist Pre-Service Teachers: Building Confidence that Promotes Wellbeing," *British Journal of Music Education* 36, no. 2 (2019): 183, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/fostering-happy-positive-learning-environment/docview/2269871702/se-2.

[81] Peter DeVries, "Reevaluating Common Kodály Practices," *Music Educators Journal*, no. 3 (2001): 25, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/reevaluating-common-kodaly-practices/docview/197182041/se-2.

[82] Ibid., 27.

[83] Ruth Boshkoff, "Lesson Planning the Kodály Way," *Music Educators Journal* 78, no. 2 (1991): 31. doi:10.2307/3398257.

Joseph also commented that the Kodály principles give students a chance to have input about how they learn and ways in which to teach the material. [84] Students can also learn by observing the teacher and their peers in a way that students gain confidence as a person and in their musical knowledge. [85] The Kodály principles demand that music educators communicate with their students' enjoyment of music in a positive classroom setting.[86] Kodály believed that music educators should endeavor to create this positive a welcoming environment in their classrooms because students are attracted to this kind of atmosphere. Notably, an environment that is appealing and calm attracts students to classrooms.[87]

The Kodály approach works well in the United States today, allowing music teachers to lend their strengths in the classroom setting. [88] Kodály understood that the music educator could either make learning pleasant or not enjoyable and enable teachers to make learning decisions based on how their knowledge and individual students keep the musical learning comfortable. [89] This element will also support students interested and involved in music during school and adult life. [90] The Kodály approach promotes the development of the student as a whole person." [91] Teaching to the entire student has many benefits. According to Goopy, the confidence level of

---

[84] Joseph, "Fostering a Happy Positive Learning Environment," 185.

[85] Ibid., 192.

[86] Sinor, "The Ideas of Kodály in America," 43.

[87] Delta Cavner and Elizabeth Gould, "Whole Language in the Music Classroom: Part 1 of 2," *Music Educators Journal* 89, no. 4 (2003): 42. doi:10.2307/3399903.

[88] Sinor, "The Ideas of Kodály in America," 41.

[89] Cavner and Gould, "Whole Language in the Music Classroom," 39.

[90] Ibid.

[91] Jason Goopy, "'Extra-Musical Effects' and Benefits of Programs Founded on the Kodály Philosophy," *Australian Journal of Music Education*, no. 2 (2013): 72. https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=111963645&site=ehost-live&scope=site.

students learning in a classroom with Kodály teaching principles appears to improve. [92] When

students experience music education set out by Kodály, students leave the class each day feeling

happy, and the music is a rewarding activity." [93] Based on these findings, implementing elements

of the Kodály learning approach will help music teachers create a positive and welcoming

environment for their students.

<center>Middle School Development</center>

Middle school students are constantly growing and developing throughout their middle

school careers.[94] Barresi states that preteens and early teenagers seek friendly and willing

teachers to guide them academically and socially.[95] To create a positive learning environment,

choral directors must have a good rapport with their students.[96] Beery mentions that middle

school students struggle with submitting to adults in authority roles; therefore, directors with

good relationships with students will have a more positive experience.[97] Barresi discovered that

middle school choir teachers must acquire the skills necessary to choose appropriate repertoire to

hold students' interest in middle school and teach musical concepts.[98] Bowers expresses that

middle school students also want to be separated from elementary students, so directors should

---

[92] Goopy, "'Extra-Musical Effects'," 73.

[93] Boshkoff, "Lesson Planning the Kodály Way," 32.

[94] A. L. Barresi, "The Successful Middle School Choral Teacher: Technical Competence, Professional Understandings, and Personal Qualities All Seem to Play a Role in the Development of the Successful Middle School Choral Teacher," *Music Educators Journal* 86, (2000): 24. https://doi.org/10.2307/3399601.

[95] Ibid., 25.

[96] Ibid., 24.

[97] Lon Beery, "Junior High/Middle School Choirs." *The Choral Journal* 52, no. 9 (2012): 61, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/junior-high-middle-school-choirs/docview/1032965613/se-2.

[98] Barresi, "The Successful Middle School Choral Teacher," 24

choose repertoire that is age appropriate.[99] Middle school directors must understand the many

changes that happened mentally and physically during the middle school time frame to provide

adequate classroom procedures.[100] Barresi summarizes that most successful middle school choir

programs have charismatic and knowledgeable teachers.[101]

According to Bowers, middle school students must feel successful in the classroom to be

engaged and motivated.[102] One strategy to keep these students engaged is to have academic

activities in game form.[103] Since time management is complex for middle school students,

Williamson suggests that music teachers post learning goals in the classroom to keep students

focused each day.[104] Clear learning objectives will also help improve singing and other musical

skills.[105] Beery discovered that directors with vibrant facial expressions bring life to the middle

school choir classroom and create a positive and inviting learning environment.[106] Sweet

conducted an intrinsic case study in which five eighth-grade students were interviewed in this

qualitative study.[107] The researcher indicated that middle school students sometimes join choir to

be with friends and are interested in learning how to sing.[108]

---

[99] Bowers, "Motivation in Middle School Choir," 92.

[100] Barresi, "The Successful Middle School Choral Teacher," 25.

[101] Ibid., 23.

[102] Judy Bowers, "Motivation in Middle School Choir," *The Choral Journal* 47, no. 5 (2006): 91. http://www.jstor.org/stable/23556303.

[103] Williamson, "Positively Adolescent," 31.

[104] Ibid., 32.

[105] Ibid.

[106] Beery, "Junior High," 61.

[107] Bridget Sweet, "A Case Study: Middle School Boys' Perceptions of Singing and Participation in Choir," *Update: The Applications of Research in Music Education* 28, no. 2 (2010): 6, https://go.openathens.net/ redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/case-study-middle-school-boys-perceptions-singing/docview/734029205/se-2

[108] Ibid.

Sweet conducted a qualitative study in which fourteen students answered questions regarding the female voice change.[109] According to Sweet, female singers experience more pitch issues, extra breathiness, and more issues between the transition from chest to head voice during their voice change, leading to a negative student perception of choir.[110] However, if teachers create a positive environment, the voice change will feel less cumbersome and stressful to middle school students.[111] Many researchers state that male and female students feel insecure as they go through a more significant voice change.[112] [113] Williamson cites that male students benefit from movement in the choir classroom and will perceive the classroom positively when movement occurs.[114] Fisher, Summitt, and Koziel included 92 middle school male students in their research about the male perception of the voice change in choir.[115] The results showed that while male students lost some voice quality during the voice change, having information from the choir director helped to limit stress ad frustration in the classroom.[116] Along with providing information to students, middle school music teachers should also look at the ranges of repertoire thoroughly to ensure the male students can sing their parents effectively.[117] Bowers also

---

[109] B. Sweet, "The Adolescent Female Changing Voice: A Phenomenological Investigation," *Journal of Research in Music Education* 63, no. 1, (2015): 77. https://doi.org/10.1177/0022429415570755

[110] Ibid., 73.

[111] Ibid., 83.

[112] Ibid., 84.

[113] R. A. Fisher, Summitt, N. L., and Koziel, E. B., "A Description of Middle School Male Singers' Voice Change and Voice Part Assignment," *Update: Applications of Research in Music Education* 40, vol. 1, (2021): 45. https://doi.org/10.1177/87551233211018209.

[114] Williamson, "Positively Adolescent," 29.

[115] Fisher, Summitt, and Koziel, "A Description of Middle School Male Singers' Voice," 49.

[116] Ibid., 46.

[117] Ibid., 47.

recommends often testing the male students' ranges to ensure they are assigned to the correct voice part to keep student perception positive.[118]

<h2 style="text-align:center">Classroom Atmosphere in Education</h2>

Many educators would agree that the classroom environment significantly impacts students' success in school.[119] While it is essential for all ages, Bronfenbrenner stated that it is vital that the classroom environment is one in which students feel safe during their teenage years.[120] However, the same welcoming classroom atmosphere may affect students differently based on other factors.[121] Aburas et al. suggest that students must understand that their learning is valuable and useful for the most outstanding student confidence and comfort.[122] Regardless of how the environment impacts students, researchers agree that the environment does influence engagement and, therefore, student achievement in school.[123]

Cipriano et al., when explicitly examining the classroom atmosphere related to students, stated that a positive learning environment could help students academically and socially better

---

[118] Bowers, "Motivation in Middle School Choir," 91.

[119] Jonathan R. H. Tudge et al., "The Promise and The Practice of Early Childhood Educare in the Writings of Urie Bronfenbrenner," *Early Child Development and Care,* no. 191, (2021): 1083, doi:10.1080/03004430.2020.1844193.; Helen Patrick, Avi Kaplan, and Allison M. Ryan, "Positive Classroom Motivational Environments: Convergence between Mastery Goal Structure and Classroom Social Climate," *Journal of Educational Psychology*, 103 (2011): 367. doi:10.1037/a0023311.; Christina Cipriano, et al., "A Multilevel Approach to Understanding Student and Teacher Perceptions of Classroom Support during Early Adolescence," *Learning Environments Research* 22, no. 2 (2019): 209, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/multilevel-approach-understanding-student-teacher/docview/2104460457/se-2.

[120] Ibid., 210.

[121] R.T. Smalley and Hopkins, "Social Climate and Help-Seeking Avoidance in Secondary Mathematics Classes," *Australian Education Researcher* 47, (2020): 451. https://doi.org/10.1007/s13384-020-00383-y

[122] Aburas et al., "Physical and Psychosocial Factors," 25.

[123] Cipriano, et al., "A Multilevel Approach to Understanding," 210.

prepare for school later in life.[124] Cipriano et al. examined fifth and sixth-grade students at a religious school to determine if specific factors influenced the student's perception of the classroom and if there was any relationship between student perception and the amount of teacher support.[125] This study suggested that classrooms needing a supportive learning environment tend to have students who do not achieve as highly.[126] It is not only the immediate classroom environment but other environments within the mesosystem of Bronfenbrenner's ecological system that can create a positive learning environment.[127] As students age and are introduced to many classroom environments, Renn and Arnold believe students can only learn successfully once they are content.[128] Smalley and Hopkins studied students enrolled in math classes at the secondary level. The researchers included 551 students in Australia for their quantitative study.[129] Their research indicated that students who feel safe and supported are more willing to take risks and learn at a deeper level of understanding.[130] Patrick, Kaplan, and Ryan state that learning best practices will not fully affect a positive learning climate.[131]

The two main components within a classroom environment are the students and the teacher. Some researchers point out that the student perception of the classroom atmosphere is based on how students and teachers perceive one another, as Moos believed in social learning

---

[124] Cipriano, et al., "A Multilevel Approach to Understanding," 210.

[125] Ibid., 214.

[126] Ibid., 213.

[127] Kristen A. Renn, and Karen D. Arnold, "Reconceptualizing Research on College Student Peer Culture," *The Journal of Higher Education* 74, no. 3 (2003): 261. https://doiorg.ezproxy.liberty.edu/10.1080/00221546.2003.11780847

[128] Renn and Arnold, "Reconceptualizing Research," 288.

[129] Smalley and Hopkins, "Social Climate and Help-Seeking Avoidance," 446.

[130] Ibid., 451.

[131] Patrick, Kaplan, and Ryan, "Positive Classroom Motivational Environments," 378.

theory.[132] The teacher is the adult in the room, so it should be weighted more heavily when

deciphering the classroom environment. Teachers exert much influence over the classroom

atmosphere, and their opinion should be more valuable.[133] Another study also stated that teacher

personality could predict classroom climate.[134] It is because teachers have so much influence on

the environment that high-quality teachers are constantly seeking new ways to improve the

atmosphere in their classrooms.[135] One researcher states that the student perception of teachers

who care directly influences the classroom environment.[136] Wentzel studied 248 eighth-grade

students for three years to discover factors related to student motivation during middle school. [137]

The results indicate that when students perceive that the teacher cares about them, they are more

likely to be motivated and focus on learning.[138] Classroom environments that support

collaboration between students saw increased engagement and student perception.[139]

       Student perceptions regarding the classroom environment are valuable to researchers

when deducing how the classroom atmosphere affects learning. However, student perceptions

can drastically differ among students in the same class.[140] Because of this, research does not

always consider student perception. Cipriano et al. found that students who felt supported

---

[132] Cipriano, et al., "A Multilevel Approach to Understanding," 212.

[133] Michael M. Abell, Eunjoo Jung, and Matthew Taylor, "Students' Perceptions of Classroom Instructional Environments in the Context of 'Universal Design for Learning," *Learning Environments Research* 14, no. 2 (2011): 174, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/students-perceptions-classroom-instructional/docview/890598729/se-2.

[134] Walberg and Anderson, "Classroom Climate," 418.

[135] Abell, Jung, and Taylor, "Students' Perceptions of Classroom Instructional Environments," 184.

[136] Wentzel, "Student Motivation in Middle School," 412.

[137] Ibid., 413.

[138] Ibid., 416.

[139] Smalley and Hopkins, "Social Climate and Help-Seeking Avoidance," 464.

[140] Cipriano, et al., "A Multilevel Approach to Understanding," 209.

positively associated with the teacher and the classroom environment.[141] Another study by Abell

et al. also stated that researchers could better understand the classroom environment if student

perspectives could be considered by choral directors when looking at individual classrooms.[142]

Walberg and Anderson suggested that students achieve higher on tests when they perceive a

positive and cooperative classroom environment.[143]

Some research suggests that the classroom environment does not influence student

perception and overall learning. Smalley and Hopkins discussed that students who perceived a

supported classroom atmosphere still did not ask for help when needed.[144] These students also

continued to avoid classwork despite acknowledging that they felt safe in the classroom.[145]

Classroom perception affects students differently; therefore, students will learn in different ways

and depths throughout the class.[146] Lizzio, Wilson, and Ryan investigated college students and

how they perceived the classroom environment. They discovered that students did not perceive

the classroom atmosphere negatively despite not knowing the subject.[147] Based on these studies,

the classroom environment is only one factor related to student perception and learning.

<div align="center">Classroom Atmosphere in Music Education</div>

The music classroom learning environment is more specific and may yield distinctive

student perceptions that differ from the traditional subject setting. This difference in student

---

[141] Cipriano, et al., "A Multilevel Approach to Understanding," 210.

[142] Abell, Jung, and Taylor, "Students' Perceptions of Classroom Instructional Environments," 172.

[143] Herbert J. Walberg and Gary J. Anderson, "Classroom Climate and Individual Learning," *Journal of Educational Psychology* 59, no. 6, (1968): 417. doi:10.1037/h0026490.

[144] Smalley and Hopkins, "Social Climate and Help-Seeking Avoidance," 463.

[145] Ibid., 463.

[146] Walberg and Anderson, "Classroom Climate," 417.

[147] Lizzio, Wilson, and Simons, "University Students' Perceptions of the Learning Environment," 35.

perspective is typically the case because the learning environment in an academic setting is directly connected to the grades and learning goals of the class.[148] However, the characteristics and levels of expectations of the learning environment can impact student perception of the learning as a whole.[149] According to research, the classroom atmosphere addresses the gap between the physical environment and possible education.[150] The Kodály approach emphasizes the musical learning environment as it creates a successful music classroom for the teacher and the students.[151]

Few studies specifically examine the learning environment of the music classroom. Papageorgi and Stavrou surveyed student perception of the music classroom. They interviewed 749 students at the secondary level about the music classroom atmosphere, and they discovered that these students had an overall positive perception of the music classroom environment.[152] However, when the researchers examined specific subgroups of students, they found that the student's perceptions differed.[153] Papageorgi and Stavrou noted that the girls were more motivated in the same environment than the boys.[154] Ensuring a positive learning environment is crucial to learning.[155]

---

[148] Lizzio, Wilson, and Simons, "University Students' Perceptions of the Learning Environment," 31.

[149] Papageorgi and Stavrou, "Student Perceptions," 3.

[150] Ibid.

[151] Harold L. Caldwell, "Review of the Kodály Context," *Music Educators Journal* 68, no. 2 (1981): 58. https://doi.org/10.2307/3395879.

[152] Papageorgi and Stavrou, "Student Perceptions," 10.

[153] Ibid., 13.

[154] Ibid., 2.

[155] Patrick, Kaplan, and Ryan, "Positive Classroom Motivational Environments," 377.

Two researchers conducted a similar study in China discussing the learning environment of the music classroom. The study included 120 elementary students and 115 secondary students in Beijing.[156] Gong and Wang investigated how technology specifically impacted student perception of the music classroom.[157] The initial student perception of the music classroom was negative, as music classes are mandatory for these students.[158] However, the study revealed an overall positive perception of the music classroom when utilizing technology in the lessons, such as Padlet and several other web-based programs.[159] MacGregor conducted a similar study to determine how students' vulnerability in the music classroom affects student perception.[160] The results did not show evidence that the music classroom environment benefits and hinders the overall study of music.[161]

<div align="center">Classroom Atmosphere in Middle School Music</div>

Daniel Albert examined the middle school music technology classroom in his research.[162] In his qualitative study, he observed one section of twenty eighth-grade students to determine if the learning environment positively impacted students.[163] Albert determined that students'

---

[156] Luxin Gong and Jingyi Wang, "Interactive Learning Environment for Effective Music Learning in Chinese Primary and Secondary Schools," *Sustainability* 15, no. 3 (2023): 23, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/interactive-learning-environment-effective-music/docview/2775019575/se-2.

[157] Ibid., 29.

[158] Ibid., 24.

[159] Ibid., 31.

[160] Elizabeth H. MacGregor, "Conceptualizing Musical Vulnerability," *Philosophy of Music Education Review* 30, no. 1 (2022): 26, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/conceptualizing-musical-vulnerability/docview/2644084107/se-2.

[161] Ibid., 27.

[162] Albert, "The Classroom Culture of a Middle School Music," 383.

[163] Ibid., 386.

opinions on the classroom environment were not consistent.[164] The researcher discovered that the

students and the teacher created a positive collaboration atmosphere.[165] Draper also conducted a

middle school music classroom study on the relationship between students, teachers, and the

curriculum.[166] The school enrolled the music class students in a compulsory class mandated by

the school district.[167] Student perception was the primary source of information for the research,

and after more collaboration occurred between the students and the teacher, the students viewed

the class more positively.[168] The teachers must work purposefully with the students to create a

positive learning environment.[169]

Both studies conducted in the middle school music classroom agree that music

significantly affects student perception of the classroom atmosphere.[170] [171] Draper examines

explicitly how the positive relationship between teacher and students created a welcoming

environment that bettered the students.[172] These results suggest that a supportive and welcoming

environment allows for authentic learning and the highest quality of musicality.[173] Because the

music classroom is distinctive from the typical academic classroom, teachers can offer students

more opportunities for choice in resources and decisions for class assignments.[174] Draper also

---

[164] Albert, "The Classroom Culture of a Middle School Music," 388.

[165] Ibid., 391.

[166] A. R. Draper, "Democracy in the Middle School Music Classroom," *Music Educators Journal* 105, (2019): 17. https://doi.org/10.1177/0027432118816147.

[167] Ibid.

[168] Ibid., 19.

[169] Sickle, "Relationships: Their Power and Importance," 67.

[170] Albert, "The Classroom Culture of a Middle School Music," 384.

[171] Draper, "Democracy in the Middle School Music," 19.

[172] Ibid., 21.

[173] Albert, "The Classroom Culture of a Middle School Music," 394.

[174] Draper, "Democracy in the Middle School Music," 22.

indicated that the middle school music classroom is where students can choose how they learn.[175] Understanding how a positive learning environment affects student perception of the classroom and the musical experiences in which they are engaged is valuable. The student perception of the middle school music choir classroom is a subject that would assist teachers and students greatly. A supportive learning environment will provide the space for students to learn.[176]

Teachers can apply these aspects of a middle school music classroom atmosphere to the middle school choir classroom environment. However, for this to occur, research must be conducted to apply these environmental factors.[177] Understanding how a positive learning environment affects student perception of the classroom and the musical experiences in which they are engaged is valuable.[178] The student perception of the middle school music choir classroom is a subject that would assist teachers and students greatly.[179]

<div align="center">Physical Classroom Configuration in Education</div>

Much research on the effects of the physical classroom arrangement has dealt with high school and college classrooms and elementary classrooms.[180] Previous research indicates that the classroom environment contributes significantly to providing the best experience for students and teachers at the high school and college levels.[181] The arrangement of the physical space

---

[175] Draper, "Democracy in the Middle School Music," 22.

[176] Ibid., 18.

[177] Patrick, Kaplan, and Ryan, "Positive Classroom Motivational Environments," 378.

[178] Lizzio, Wilson, and Simons, "University Students' Perceptions of the Learning Environment," 30.

[179] Ibid., 31.

[180] Ibid., 32.

communicates how students interact and engage in the classroom. Teachers can alleviate many problems by simply rearranging the space.[182] Educators can alter the configuration quickly to meet the needs of students.[183] Brukštutė focused on the basic history of how teachers organized their classrooms from fifth grade to twelfth grade.[184] When public schools first appeared, desks were configured in rows mainly to ensure that students got sunlight during the day.[185] Later in the 1960s and 1970s, classrooms moved to a more widespread, open concept.[186] The researcher took this as a positive move, stating that desks in rows allow students to be more passive in learning than active participants.[187] Brukštutė also remarked that as districts build new schools, the space shape remains the same, but the teachers' configuration constantly changes.[188] Gremmen et al. emphasized the importance of an organized classroom to increase learning.[189]

Wright points out that creating a positive learning environment requires work and planning.[190] Seet et al. included freshmen and sophomore participants from Lee Kong Chain

---

[181] Amanda Careena Fernandes and Jinyan Huang, "Chinese Teacher Perceptions of the Impact of Classroom Seating Arrangements on Student Participation," *International Journal of Applied Educational Studies* 13, no. 1 (2012): 49, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/chinese-teacher-perceptions-impact-classroom/docview/1033775910/se-2.

[182] Ibid., 52.

[183] Kepez and Ust, "Collaborative Design of an Active Learning Classroom," 529.

[184] Grėtė Brukštutė, "Physical Classroom Environment and Pedagogy," *Rigas Tehniskas Universitates Zinatniskie Raksti* 15, no. 1 (2019): 38, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/physical-classroom-environment-pedagogy/docview/2587628391/se-2.

[185] Ibid., 39.

[186] Ibid.

[187] Ibid.

[188] Brukštutė, "Physical Classroom Environment," 40.

[189] Gremmen et al., "Considerations for Classroom Seating," 750.

[190] Ali Wright, "Creating a Positive Classroom Culture: Minute by Minute," *Educational Horizons* 92, no. 4 (2014): 15. http://www.jstor.org/stable/42927313.

School of Medicine in Singapore to observe how the seating arrangement influenced Team-based learning.[191] The results indicated that seating configuration and how the seats were faced significantly impacted student engagement.[192] Kepez and Ust conducted exploratory, qualitative research with high school students and teachers.[193] The teacher and student groups worked separately during the experiment to create a classroom arrangement for an active learning class.[194] The teacher group included seven high school teachers, and the student group included ten high school students.[195] The researchers concluded that the teachers preferred a different configuration than students' for active learning situations.[196] Fernandez and Huang also conducted research at the high school level, however their study was about the teacher perception of classroom arrangement in China.[197] The researchers surveyed the high school teachers to determine how the teacher's perceptions of the physical configuration influenced student engagement.[198] Seventy-five teachers completed the survey, and results indicate that

---

[191] H.A.A. Seet, Tan, E. & Rajalingam, P., "Effect of Seating Arrangement on Class Engagement in Team-based Learning: a Quasi-Experimental Study," *Medical Science Education* 32, (2022):227. https://doi.org/10.1007/s40670-021-01469-7.

[192] Ibid., 234.

[193] Orcun Kepez and Selin Ust, "Collaborative Design of an Active Learning Classroom with High School Students and Teachers," *International Journal of Architectural Research* 14, no. 3 (2020): 528, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/collaborative-design-active-learning-classroom/docview/2534600960/se-2.

[194] Ibid., 525.

[195] Ibid.

[196] Ibid., 526.

[197] Amanda Careena Fernandes and Jinyan Huang,"Chinese Teacher Perceptions of the Impact of Classroom Seating Arrangements on Student Participation," *International Journal of Applied Educational Studies* 13, no. 1 (2012): 49, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/chinese-teacher-perceptions-impact-classroom/docview/1033775910/se-2.

[198] Fernandez and Huang, "Chinese Teacher Perceptions," 50.

teachers need to remember that seating configurations can pose benefits and threats to student engagement. [199]

High school and collegiate students stated that the classroom configuration impacted their learning.[200] Even at the end of students' educational careers, the space in which they learn affects student perspectives. Kepez and Ust reported that students are more willing to try new arrangements in the room to discover if learning could be improved.[201] Students also indicated that they do not need to stay in the same space for the entire class but would enjoy moving to a new configuration within the same class period.[202] The high and college teachers appeared to set up the physical classroom configuration based on their needs and prior experiences and not always what was best for the students.[203] In one study, teachers said that an L-shaped arrangement is best for managing the learning and the physical space[204] This configuration also eliminates the idea of a back row of students who will not learn effectively.[205] [206]

The learning environment is greatly affected by the configuration of the physical space. Kepez and Ust state that the typical classroom arrangement does not meet the current needs of students and the overall learning environment.[207] Classroom configurations should help students understand that it is a safe and equal space for learning and growing.[208] When students enter a

---

[199] Fernandez and Huang, "Chinese Teacher Perceptions," 65.

[200] Seet et al., "Effect of Seating Arrangement," 235.

[201] Kepez and Ust, "Collaborative Design of an Active Learning Classroom," 534.

[202] Ibid., 538.

[203] Ibid., 537.

[204] Ibid., 527.

[205] Ibid., 528.

[206] Fernandes and Huang, "Chinese Teacher Perceptions," 60.

[207] Kepez and Ust, "Collaborative Design of an Active Learning Classroom," 525.

[208] Seet et al., "Effect of Seating Arrangement," 235.

classroom not set out in a welcoming manner, it could negatively influence student perception and engagement.[209] Some possibilities of an uncomfortable classroom include improper lighting, and students cannot hear or see the teacher when needed.[210] If possible, students should be able to have a say in the physical configuration of the classroom to provide the highest student engagement and a positive learning experience.[211]

Research is needed for classroom arrangement at the elementary school level as very little exists currently on the subject.[212] According to Aburas et al., it is of the utmost importance that teachers have access to the newest information to provide the best environment for the needs of the students and teachers.[213] Pulay and Williamson conducted a study in a Pre-K classroom to discover if L.E.D. lighting placed around the classroom affected student engagement.[214] They discovered that students were more engaged with the L.E.D. lights placed around the seating than with the fluorescent lighting in the ceiling.[215] Another study at the elementary level showed that an adjustable seating configuration works would provide for students.[216] These researchers piloted a literature review based on the research already published on the subject of seating along with other physical classroom factors.[217] Tobia et al. included seventy-seven fourth and fifth-grade students in a field study in deciding if the seating configuration affected students'

---

[209] Fernandes and Huang, "Chinese Teacher Perceptions," 60.

[210] Ibid.

[211] Ibid., 65.

[212] Tobia et al., "The Influence of Classroom Seating," 6624.

[213] Rehab Aburas, Kristi Gaines, and Hwang Su-Jeong, "Physical and Psychosocial Factors in Classroom Design for Elementary Level Schools," *The International Journal of Early Childhood Learning* 20, no. 4 (2014): 19, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/physical-psychosocial-factors-classroom-design/docview/2712914870/se-2.

[214] Pulay and Williamson, "A Case Study," 13.

[215] Ibid., 20.

[216] Aburas et al., "Physical and Psychosocial Factors," 24.

[217] Aburas et al., "Physical and Psychosocial Factors," 20.

cognition.[218] Gremmen et al. investigated seating arrangements from a teacher's perspective. They included fifty teachers from grades fourth, fifth, and sixth to ascertain whether classroom configuration was essential for student academic achievement.[219]

Some researchers believe that classroom configuration can be an improvement or detrimental to the students.[220, 221] Aburas et al. also agree by claiming that the classroom arrangement greatly influences students, however this study only examines the positive influences rather than the negative ones.[222] Tobias et al. concluded that a flexible classroom arrangement would be best to meet the needs of each activity for the students.[223] Gremmen et al. determined that teachers should be more aware of the physical configuration of the classroom as a way to manage the classroom as a whole.[224] Because elementary school students study many subjects within one room, the teachers must access the physical configuration to keep students engaged and meets their needs.[225]

---

[218] V. Tobia, Sacchi, S., Cerina, V. et al., "The Influence of Classroom Seating Arrangement on Children's Cognitive Processes in Primary School: The Tole of Individual Variables," *Curr Psychol* 41, (2022): 6525. https://doi.org/10.1007/s12144-020-01154-9.

[219] Mariola C. Gremmen et al.,"Considerations for Classroom Seating Arrangements and the Role of Teacher Characteristics and Beliefs," *Social Psychology of Education: An International Journal* 19, no. 4 (2016): 757, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/considerations-classroom-seating-arrangements/docview/1855036190/se-2.

[220] Tobia et al., "The Influence of Classroom Seating," 6622.

[221] Gremmen et al., "Considerations for Classroom Seating," 750.

[222] Aburas et al., "Physical and Psychosocial Factors," 27.

[223] Tobia et al., "The Influence of Classroom Seating," 6630.

[224] Gremmen et al., "Considerations for Classroom Seating," 769.

[225] Aburas et al., "Physical and Psychosocial Factors," 31.

Physical Classroom Configuration in Music Education

The organization of any music classroom will influence students in daily rehearsals and concerts.[226] Students in elementary until college need to understand the physical configuration of the room and how that applies to them as individuals. However, most research primarily includes the music classroom in a choir setting.[227] Despite this observation, there is still much to learn. Yi looked at seating arrangements in an orchestra classroom and made the statement that the physical aspects of the music classroom must be considered by teachers as it plays a vital role for the students.[228] Yi conducted a qualitative study over three years following the same group of students from eighth to tenth grade.[229] This researcher learned that students became more aware of the ensemble and were more determined to learn after moving seats not based on a hierarchy system of chairs.[230] Yi decided that the seating arrangement in an orchestra setting affected students.[231]

Roseth examined instrumentalist seating at the secondary level for band and orchestra from the perspective of 436 directors.[232] Teachers in this study consistently commented that the seating configuration of the classroom stayed the same throughout the school year due to the

---

[226] K. Adams, "Choral Configuration: An Overview of Research and Implications for the Choral Music Educator," *Update: Applications of Research in Music Education,* 37, (2019): 28. https://doi.org/10.1177/8755123318783526

[227] B. Silvey, A., Regier, B. J., and Wacker, A. T., "Effects of Wind Ensemble Seating Configurations on College Instrumentalists' Perceptions of Ensemble Sound," *International Journal of Music Education* 36, (2018): 510. https://doi.org/10.1177/0255761418771103

[228] Tammy S. Yi, "Alternative Seating Practices: Pedagogy of the Back of the Orchestra," *Music Education Research*, (2023): 2. https://doi.org/10.1080/14613808.2023.2187042

[229] Ibid., 3.

[230] Yi, "Alternative Seating," 11.

[231] Ibid.

[232] N. E. Roseth, "A Survey of Secondary Instrumental Teachers' Immediacy, Ensemble Setup, and Use of Classroom Space in Colorado and Indiana," *Journal of Research in Music Education* 68, (2020): 312. https://doi.org/10.1177/0022429420944227

physical constraints of the classroom itself.[233] Another study included forty college

instrumentalists from a wind ensemble in which teachers based the seating on capability.[234] The

researchers investigated the student perspective of several different seating configurations.[235]

After playing in these alternate arrangements, the results implied that students expressed

substantive opinions about how the seating affected their performance socially and musically.[236]

Silvey et al. points out that this result aligns with similar studies in the choir realm.[237]

    Daugherty researched how adding more space physically on risers impacted student and

listener perception.[238] The choir included in this study is a group of students aged sixteen to

eighteen from a public high school in the United States.[239] The results dictated that the students

preferred more spacing between the risers and the listeners.[240] Ekholm also conducted a similar

study but only included sixty-five music educators' perspectives via survey.[241] He concluded that

physical configuration did impact the perspective of the teachers.[242] Later Daugherty et al.

conducted a similar study to his first, but this time, they included twenty-seven college students

---

[233] Roseth, "A Survey of Secondary Instrumental Teachers'," 325.

[234] Silvey et al., "Effects of Wind Ensemble Seating," 510.

[235] Ibid., 511.

[236] Ibid., 516.

[237] Ibid., 517.

[238] James F. Daugherty, "Spacing, Formation, and Choral Sound: Preferences and Perceptions of Auditors and Choristers," *Journal of Research in Music Education* 47, no. 3 (1999): 227. https://doi.org/10.2307/3345781.

[239] Ibid., 228.

[240] Daugherty, "Spacing, Formation, and Choral Sound," 236.

[241] E. Ekholm, "The Effect of Singing Mode and Seating Arrangement on Choral Blend and Overall Choral Sound," *Journal of Research in Music Education* 48, (2000): 128. https://doi.org/10.2307/3345571

[242] Ibid., 129.

in SATB formation.[243] This study slowly increased the space between singers on the risers vertically and horizontally, and the singers concluded that more space in both directions was preferred.[244] According to Daugherty et al., students can hear themselves individually and in the ensemble in an arrangement with more space between students.[245] Adams studied the literature to discover if there was any other research regarding the classroom configuration in a choral setting, and she found many valuable applications for current directors.[246] Each researcher yielded the same result in these studies: the students preferred more space in a riser setting.[247] Daugherty concludes that more research on this subject would benefit other classroom configurations in a choral setting.[248]

Repertoire Selection in Music Education

One of an ensemble director's most critical roles is choosing repertoire.[249] Based on research and skill acquired at the collegiate level, educators' selection repertoire on many factors. Silvia and Silvey researched with 210 undergraduate students to determine whether the repertoire's difficulty level and the ensemble's size influenced performance.[250] The results

---

[243] J. F. Daugherty, Manternach, J. N., & Brunkan, M. C., "Acoustic and Perceptual Measures of SATB Choir Performances on Two Types of Portable Choral Riser Units in Three Singer-Spacing Conditions," *International Journal of Music Education* 31, (2013): 360. https://doi.org/10.1177/0255761411434499

[244] Ibid., 364.

[245] Ibid., 370.

[246] Adams, Choral Configuration," 25.

[247] Adams, Choral Configuration," 25.; Ekholm, "The Effect of Singing Mode," 127.; Daughtery, "Spacing, Formation, and Choral Sound," 230.; Roseth, "A Survey of Secondary Instrumental Teachers'," 307.

[248] Daugherty, "Spacing, Formation, and Choral Sound," 236.

[249] Armes, "Backward Design," 58.

[250] J. M. Silveira and Silvey, B. A., "Effects of Ensemble Size and Repertoire Difficulty on Ratings of Concert Band Performances," *Journal of Research in Music Education* 68, (2020): 141. https://doi.org/10.1177/0022429420908

indicated that the judges awarded higher scores to ensembles with more difficult repertoire.[251]

Based on this discovery, directors should choose a more demanding repertoire for performances

that receive a rating.[252] North and Davenport completed the Short Test of Musical Preferences

with 157 adult learners to discover if personality affected musical preference.[253] The researchers

reported that personality does predict musical taste.[254]

     Hopkins and Armes created basic guidelines for choosing repertoire based on others'

research. Both authors agree that choosing repertoire is vital to student success in the

classroom.[255,256] Hopkins states that repertoire should not be so challenging that students get

frustrated.[257] Armes believes teachers should base the difficulty level on the end goal in a

backward design plan.[258] Both authors emphasize that directors should know their students'

ability levels and choose accordingly. Teachers should not choose repertoire simply because the

students like it.[259,260] Rotjan communicates that music directors have other outside factors to

consider when choosing repertoire, like administration and parents.[261] The researcher also points

out that it is beneficial to involve students when selecting music and not always base the decision

---

[251] Silveira and Silvey, "Effects of Ensemble," 147.

[252] Ibid., 138.

[253] Davenport and North, "Predicting Musical Taste," 839.

[254] Ibid., 844.

[255] Hopkins, "Programming in the Zone," 69.

[256] Armes, "Backward Design," 54.

[257] Hopkins, "Programming in the Zone," 70.

[258] Armes, "Backward Design," 56.

[259] Armes, "Backward Design," 56.

[260] Hopkins, "Programming in the Zone," 74.

[261] M. Rotjan, "Deciding For or Deciding With: Student Involvement in Repertoire Selection," *Music Educators Journal* 107, (2021): 29. https://doi.org/10.1177/00274321211013879

on learning objectives.[262] The learning occurs from choosing the repertoire, not only the standards taught by the music itself.[263] Rotjan agrees that music educators need to understand students' abilities and preferences before making decisions about repertoire.[264]

Lee conducted a qualitative study to examine if teachers' backgrounds affect the repertoire they choose in the general music classroom.[265] By interviewing 127 teachers, the results indicate that teacher background impacts students' song choice.[266] Lee suggests a break from Western-based music and incorporating multicultural music in the general music classroom, as this will improve student perception.[267] Kruse looked explicitly at the band classroom to inform music educators about how students perceive their role in the classroom.[268] The researcher interviewed six students for the qualitative study, and nearly all participants said choosing a more challenging repertoire is more valuable than any other factor.[269] In the future, Kruse suggests that students be allowed to participate in the decision as it will increase student engagement.[270]

---

[262] Rotjan, "Deciding For or Deciding With," 29.

[263] Ibid., 32.

[264] Ibid., 29.

[265] S. Lee, "General Music Teachers' Backgrounds and Multicultural Repertoire Selection," *Update: Applications of Research in Music Education* 36, (2018): 38. https://doi.org/10.1177/8755123317717052

[266] Ibid., 41.

[267] Ibid., 43.

[268] N. B. Kruse, "Silent Partners: Uncovering Middle School and High School Students' Perceptions of Their Roles in Two School–University Partnerships," *Update: Applications of Research in Music Education* 31, (2012): 67. https://doi.org/10.1177/8755123312458438.

[269] Kruse, "Silent Partners," 67.

[270] Ibid., 70.

Music educators at the collegiate level often select repertoire in response to cultural trends.[271] Cumberledge and Williams surveyed 278 college students to determine student perception of the repertoire in the ensembles in which they were involved.[272] The answers from the survey signified that students believed that teachers chose music to represent students' backgrounds and to be responsive to the current culture.[273] They conclude that the director should only choose repertoire.[274] Kallio conducted a study in Finland at the middle school level regarding including popular music.[275] The researcher interviewed five teachers for this instrumental case study and discovered that teachers made repertoire choices situationally.[276] The results indicated that teachers decided to include popular music or not by deciding if it was ethically appropriate.[277] Forbes identified front-runners in choral music education and talked with them about choosing repertoire for high school students.[278] Forbes believes that it begins with the director having a well-rounded philosophy of music education based on the data collected from 177 secondary choir directors.[279] Most directors in this study stated they have a specific process for choosing repertoire for all classes.[280] However, these directors chose more music from other

---

[271] J. P. Cumberledge and Williams, M. L., "Representation in Music: College Students' Perceptions of Ensemble Repertoire," *Research Studies in Music Education*, (2022). 3. https://doi.org/10.1177/1321103X211066844

[272] Ibid., 6.

[273] Ibid., 4.

[274] Ibid., 13.

[275] A. Kallio, "Drawing a Line in Water: Constructing the School Censorship Frame in Popular Music Education," *International Journal of Music Education* 33, (2015): 197. https://doi.org/10.1177/0255761413515814.

[276] Ibid., 198.

[277] Ibid., 207.

[278] Guy W. Forbes, "The Repertoire Selection Practices of High School Choral Directors," *Journal of Research in Music Education* 49, no. 2 (2001): 103. https://doi.org/10.2307/3345863.

[279] Forbes, "The Repertoire Selection Practices," 103.

[280] Ibid., 112.

cultures for the most advanced groups.[281] Directors who choose repertoire in an unorganized

manner tend to have more issues when teaching music, leading to behavior issues in the

classroom.[282]

<div align="center">Repertoire Selection in Middle School Choir</div>

Hartwick and Reik investigate how choir programs run based on qualitative data from

twelve Australian choir directors.[283] Based on the information, teenagers and preteens typically

choose popular music and want to be a part of choir programs that include this type of music.[284]

However, choir directors who choose a wide range of repertoire also attract middle school-aged

students.[285] The researchers also discovered that choir directors who choose more current

repertoire still plan to include appropriate vocal techniques in the curriculum.[286] Hedden and

Allen agree that popular music is an appropriate repertoire for middle school students, but they

warn that directors should ensure that the quality of the repertoire remains suitable.[287] They

examined the repertoire selection process of six choral directors using a mixed methods

analysis.[288] Forbes also cites outside pressure from administration and parents when choosing

popular music as repertoire.[289]

---

[281] Forbes, "The Repertoire Selection Practices," 108.

[282] Ibid., 118.

[283] Hartwick and Reik, "Choir in the Age," 37.

[284] Ibid., 42.

[285] Ibid.

[286] Ibid., 43.

[287] Hedden and Allen, "Conductor's Literature Selection," 5.

[288] Ibid., 6.

[289] Forbes, "The Repertoire Selection Practices," 119.

Two researchers point out that choosing repertoire guides the choir rehearsals and curriculum, so the director must choose valuable music.[290] Moss also states that music teachers should arrange repertoire for middle school groups if they cannot find music that fits their current needs.[291] Shaw suggests that choir directors purposefully incorporate repertoire outside Western culture to provide a wide range of repertoire for middle school students.[292] This inclusion will teach students to quickly move from one vocal style to another as young choir students.[293]

Understanding how middle school choir directors choose repertoire for middle school students is essential.[294] Hedden and Allen discovered that most choir teachers choose music prior to rehearsals with only a general understanding of the student's abilities.[295] Based on these results, only a few teachers choose repertoire after meeting students and gathering additional information.[296] Turman decided to provide many potential repertoire suggestions for middle school choir teachers based on current trends.[297] The main goal of the music director is to choose a repertoire that is on a suitable skill level for the current students.[298] Turman warns that directors should not choose a too difficult repertoire as it will frustrate the students and the teacher.[299] For

---

[290] Moss, "The Art of Choosing," 43.

[291] Ibid.

[292] Shaw, Culturally Responsive, 11.

[293] Ibid., 35

[294] Hedden and Allen, "Conductor's Literature Selection," 7.

[295] Ibid., 20.

[296] Ibid., 15.

[297] Turman, "Repertoire and Resources," 57.

[298] Ibid., 59.

[299] Ibid., 57.

example, Turman recommended only adding literature in a foreign language once students are ready. He suggested choosing repertoire with a text that is repetitive and short in length.[300]

Summary

This review explores literature about classroom configuration, repertoire selection, and classroom atmosphere. The researcher evaluated students' perceptions of the middle school chorus classroom as influenced by the classroom environment, precisely the classroom configuration and repertoire selection. The researcher explores current theories concerning the middle school classroom environment and student development. A gap exists in the literature on student perspectives of the middle school choir classroom atmosphere and how repertoire selections and classroom configuration affect these perspectives. This study examined the effects of repertoire selection and classroom configuration in the middle school choir classroom to predict student perspectives on the classroom atmosphere.

---

[300] Turman, "Repertoire and Resources," 64.

Chapter Three: Methodology

Introduction

Chapter Three details the research design applied to explore the correlation between repertoire selection, classroom configuration, and classroom atmosphere. This chapter begins with introducing the design of the research, including defining the variables. The research question and hypothesis follow. The researcher concludes with the participants and setting, procedures, instrumentation, and data analysis implemented for the research.

Design

This study applied a non-experimental, quantitative, predictive correlational design to analyze how accurately student perception of the classroom atmosphere in the middle school choir classroom can be predicted by repertoire selection and classroom configuration. A quantitative research design is appropriate because it is best for analyzing relationships.[301] Gallo conducted a multiple linear regression with survey data to discover the relationship between professional development for music teachers and other disciplines.[302] The results indicated that music educators experience fewer opportunities to participate in professional development than non-music teachers, but the relationship between the two was non-significant.[303]

The predictor variables were repertoire selection and classroom configuration, and the criterion variable was student perspectives of the middle school choir classroom atmosphere. A quantitative predictive correlational study was conducted to predict the results of surveys

---

[301] Creswell and Creswell, *Research Design,* 4.

[302] D. J. Gallo," Professional Development Quality in U.S. Music Education: An Analysis of the 2011–2012 Schools and Staffing Survey," *Journal of Research in Music Education* 66, vol. 2, (2018): 172. https://doi.org/10.1177/0022429418764453

[303] Ibid., 180.

regarding student perspectives. Gall, Gall, and Borg state that predictive correlational studies provide "the extent to which a criterion behavior pattern can be predicted…data for developing a theory about the determinants of the criterion behavior pattern…and evidence about the predictive validity of the test or tests that were correlated with the criterion behavior pattern."[304]

Burak and Atabek conducted a multiple linear regression study including ninety-four college students to discover the relationship between stress level, depression, and job satisfaction.[305] The results indicate that increased depression and high-stress levels do not predict job satisfaction as other factors exist.[306] Gonzalez-Moreno implemented a multiple regression analysis to learn about college music students' perceptions of environmental factors and academic experience.[307] The results show significant differences when students are motivated related to the participants' perspectives of their worth and ability.[308] At the United States Military Academy, Butler and McCauley investigated the validity of high school rank and the Scholastic Aptitude Test and predicted students' grade point averages.[309] The results indicated that the predictors were valid across all four years students were enrolled.[310]

---

[304] Meredith D. Gall, Joyce P. Gall, and Walter R. Borg, *Educational Research: An Introduction*, 8th ed. (London: Pearson, 2007), 329.

[305] Sabahat Burak and Oguzhan Atabek, "Association of Career Satisfaction with Stress and Depression: The Case of Preservice Music Teachers," *Journal of Education and Learning* 8, no. 5 (2019): 127. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1229235&site=ehost-live&scope=site.

[306] Ibid., 130.

[307] Patricia Adelaida Gonzalez-Moreno, "Student Motivation in Graduate Music Programmes: An Examination of Personal and Environmental Factors," *Music Education Research* 14, no. 1 (2012): 97. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ960290&site=ehost-live&scope=site.

[308] Ibid., 98.

[309] Richard P. Butler and Clark McCauley, "Extraordinary Stability and Ordinary Predictability of Academic Success at the United States Military Academy," *Journal of Educational Psychology* 79, no. 1 (1987): 83, doi:10.1037/0022-0663.79.1.83.

[310] Ibid., 84.

Potential results are limited within a quantitative predictive correlational study. Predictive studies can only provide predictions, criteria, and validity information.[311] Creswell and Creswell also state that predictive studies are not causational and can only inform the researcher about the relationships between variables.[312] The researcher administered questionnaires in this quantitative study; therefore, knowing what the students think about the variables is impossible. Gall, Gall, and Borg assert that questionnaires are limited because they cannot investigate the respondents' deep thoughts and personal experiences.[313]

<div align="center">Questions and Hypotheses</div>

RQ1: How accurately can a linear combination of classroom configuration and teacher repertoire selection predict middle school choir student perception of classroom atmosphere?

H$_0$1: There is no significant predictive relationship between classroom configuration and teacher repertoire selection and middle school choir classroom atmosphere.

<div align="center">Participants</div>

The population in this study includes students in a Northeast Georgia public middle school. As of March 2023, the school system includes 27,225 students from Pre-K through twelfth grade. Within the school system, 56.06% of students qualify for free or reduced lunch, and 16.6% are English Language Learners. The student population is 1.5% Asian, 6% Black, 23.6% Hispanic, 3% Multi-Racial, and 65.5% White.

---

[311] Creswell and Creswell, *Research Design*, 157.

[312] Ibid., 4.

[313] Gall, Gall, and Borg, Educational Research: An Introduction, 222.

Participants included students enrolled in a choir class in the sixth, seventh, or eighth grades at a middle school in the school system. The researcher applied convenience sampling for this study as students were required to participate in the school's defined population: middle school choir.[314] Assuming a medium effect size with the statistical power of .7, $\alpha = .05$, correlational research requires a minimum sample size of 66.[315] For this study, the choir teacher at the middle school distributed the study information to all sixth, seventh, and eighth-grade students during choir class one week before issuing surveys. The researcher provided each respondent with a child assent form and a parental opt-out form. The choir director read the verbal instructions document to the students and instructed them that if their parents did not want them to participate in the study, they needed to sign and return the opt-out form within the week. The teachers then sent a recruitment email informing all parents of the study in which the teacher attached the two forms.

Respondents only reported their age and grade because the researcher utilized survey responses for this quantitative study. The sample entailed 117 student responses. The responses comprised 41 sixth-grade students, 46 seventh-grade students, and 30 eighth-grade students. The sample contained 14 eleven-year-old students, 39 twelve-year-old students, 45 thirteen-year-old students, and 19 fourteen-year-old students. The school opened in the fall of 2018, and the chorus program received state-of-the-art equipment for the classroom, including Wenger risers, chairs, and music stands. The school district also gave the school a significant budget to purchase music and other items to build the choir program. The choral director offered sixth-grade, seventh-grade, eighth-grade, and eighth-grade intermediate choir for high school credit.

---

[314] Gall, Gall, and Borg, Educational Research: An Introduction, 175.

[315] Ibid., 143.

Setting

This research was conducted in a middle-class school system in Northeast Georgia. The

school system is in a suburb of a large city. The school system is in a county with a population of

approximately 207,400. The county's median household income is $67,500, with about 12.1% of

the population below the poverty line. The school system employs over 2,100 staff members in

the 37 schools. There were 12 magnet schools from kindergarten through twelfth grade and 18

school programs of choice. Within the middle school of the sample population, 10.7% are

classified as economically disadvantaged, and 13.2% are labeled as students with disabilities.

There were 828 students enrolled at the middle school. There were 260 students in the sixth

grade, 280 in the seventh grade, and 288 in the eighth grade.

Instrumentation

The choir director distributed two surveys to students in a single Google Form for this

study. These surveys included the Short Test of Musical Preferences – Revised (STOMP-R)

Assessment and the National School Improvement Partnership's Classroom Climate

Questionnaire – Secondary (CCQ-S).

Short Test of Musical Preferences- Revised

Rentfrow and Gosling created the Short Test of Musical Preferences (STOMP) to

examine the relationship between musical preference and personality.[316] Rentfrow and Gosling

conducted six studies to provide factor reliability.[317] Studies one through three included

participants from the University of Texas in Austin. After the researchers completed study four,

---

[316] Peter J. Rentfrow and Samuel D. Gosling, "The Do Re Mi's of Everyday Life: The Structure and Personality Correlates of Music Preferences," *Journal of Personality and Social Psychology* 84, no. 6 (2003): 1245.

[317] Ibid., 1238.

they identified the four main areas of musical preferences.[318] Studies five and six focus on how

these areas relate to personality. The STOMP-Revised version is housed by the University of

Cambridge by the Cambridge Personality and Social Dynamics Research Group, where Jason

Rentfrow is the lead researcher.[319] The research group focuses on how each individual's

personality is "expressed in a variety of domains." [320] The STOMP-R was the beginning of their

research to discover how personality is expressed via social media. [321]

     The STOMP and the STOMP-R are free for administration via the Internet. The musical

clips are only available after emailing the creator for permission. The original version includes

fourteen items, and the revised version incorporates twenty-three.[322] In 2013, Bonneville-Roussy

et al., the survey's creators, dealt with musical preference and the listener's age.[323] These

researchers used the STOMP-R version, excluding the soundtracks and oldies tracks.[324] Chung et

al. conducted the STOMP-R survey to discover if the Type D personality affected musical

taste.[325] Results showed that factor analysis was conducted on the remaining 15 items of

STOMP-R with varimax rotation," and "the Kaiser–Meyer–Olkin (KMO) measure verified the

sampling adequacy for the analysis."[326] In 2021, Hird and North administered the STOMP-R to

---

[318] Rentfrow and Gosling, "The Do Re Mi's," 1247.

[319] "STOMP-R", Cambridge Projects and Measures, https://www.psd.psychol.cam.ac.uk/projects-measures.

[320] "STOMP," Members, https://www.psd.psychol.cam.ac.uk/.

[321] Ibid.

[322] "STOMP-R."

[323] "Arielle Bonneville- Roussy, Peter J. Rentfrow, Man K. Xu, and Jeff Potter, "Music Through The Ages: A Trends in Musical Engagement and Preferences from Adolescence through Middle Adulthood," *Journal of Personality and Social Psychology* 105, no. 4 (2013): 703. doi. 0.1037/a0033770

[324] Ibid., 707.

[325] Yu-Chi Chung, Alinka E. Greasley, and Li-Yu Hu, "The Relationship between Musical Preferences and Type D Personality," *Psychology of Music* 47, no. 1 (2019): 3.

[326] Ibid., 8.

deduce if musical taste correlated with the age and life place of the listener.[327] The results of this

study indicated that the STOMP-R was a valid survey based on the reliability factor.[328]

---

[327] E. Hird and A. North, "The Relationship Between Uses of Music, Musical Taste, Age, and Life Goals," *Psychology of Music* 49, no. 4, (2021): 872. https://doi.org/10.1177/0305735620915247.

[328] Ibid., 884.

Table 3.1 Reliability STOMP- R "Structure of the Seven-Item Short Test of Music Preference—

revised with promax rotation."[329]

Genre	Loadings						
	Blues	Rock	Rap	Religious	Classical	Easy Listening	Dance
Blues	0.86						
Bluegrass	0.63						
Jazz	0.54						
Reggae	0.4						
Folk	0.35						
Rock		0.73					
Heavy metal		0.71					
Grunge		0.66					
Alternative		0.37					
Soul/R&B	0.32		0.7				
Rap/hip hop			0.7				
Pop			0.47			0.37	
Religious				0.83			
Gospel				0.83			
Classical					0.82		
Opera					0.53		
Easy Listening/golden						0.66	
County						0.37	
Soundtrack/theme song			0.31			0.37	
Dance/electronica							0.56
New Age						0.38	0.46
Disco						0.34	0.35
World							
Percentage of variance	17.95%	9.35%	7.39%	4.21%	3.30%	2.37%	2.23%

Source: Data adapted from Emily Hird and Adrian North, "The Relationship Between Uses of
Music, Musical Taste, Age, and Life Goals," *Psychology of Music* 49, no. 4, (2021): table 1.
https://doi.org/10.1177/0305735620915247.

The STOMP-R is a valid and reliable instrument. Hird and North stated that "the

---

[329] Hird and North, "The Relationship Between Uses of Music," 878.

assumptions of linearity, normality, and multi-colinearity were met for factor analysis" for the

STOMP-R.[330] Results state that "Bartlett's test of sphericity was significant with a KMO of .98,

indicating suitability for analysis."[331] According to the researchers, "Exploratory factor analysis

using principal axis factoring with promax rotation was performed to determine the factor

structure of the STOMP-R."[332] The researchers conducted an examination to determine and

establish appropriate validity. Davenport and North "had similar internal consistency for scores

on each of the resulting factors, Cronbach's α=.58–.74."[333] Details related to the STOMP-R

validity are displayed in Figure 3.1.

---

[330] Hird and North, "The Relationship Between Use of Music," 868.

[331] Ibid., 878.

[332] Ibid.

[333] Davenport and North, "Predicting Musical Taste," 838.
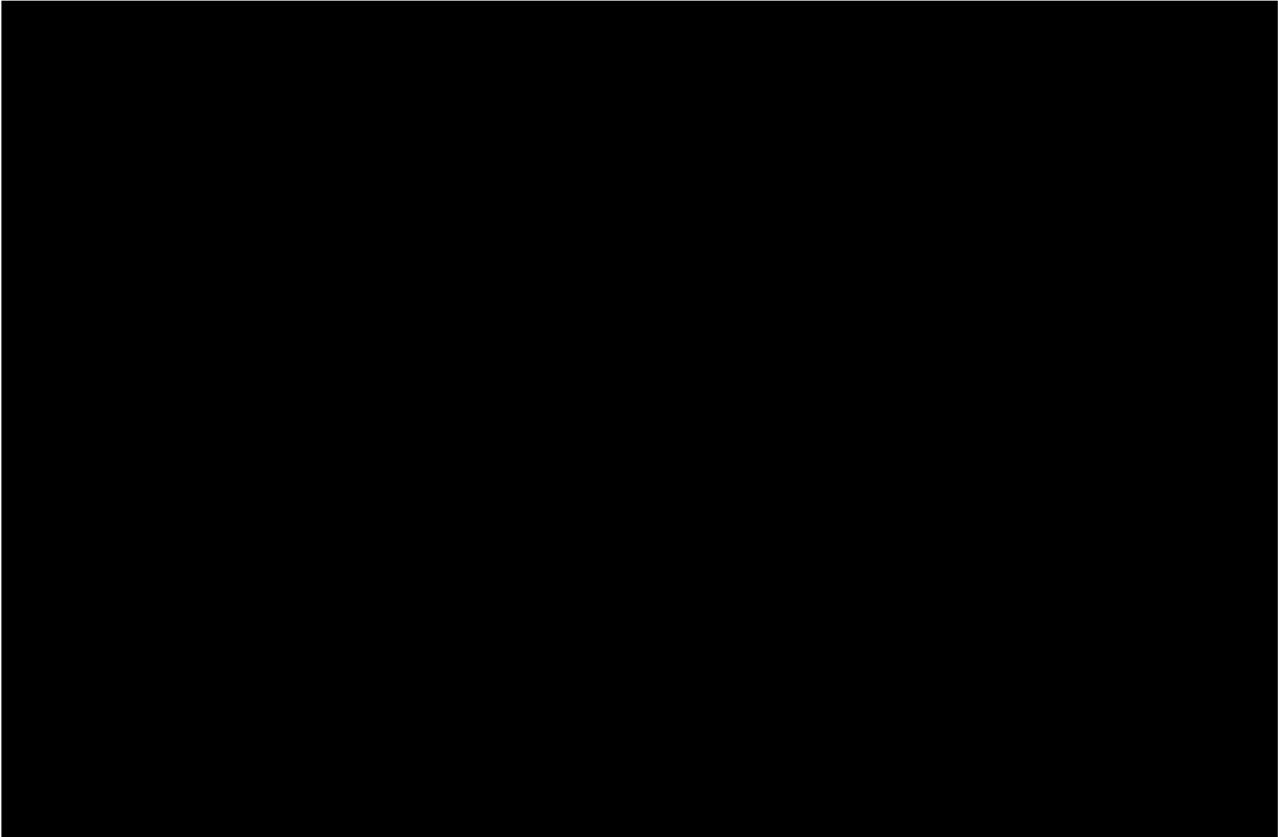
Figure 3.1: "Standardized parameter estimates for Model 2 of the music-preference data in Study 4. 2 (71, N 500) 137.05; goodness-of-fit index=96; adjusted goodness-of-fit index=94; root-mean-square error of approximation =.04; standardized root-mean-square residual = .05. e = error variance."[334]

The original STOMP-R includes twenty-three genres of music that the participant must listen to and rate based on individual preference.[335] Each example utilizes a seven-point Likert scale of measurement: 1= Dislike Strongly, 2= Moderately Dislike, 3= Dislike a Little, 4= Neither like nor dislike, 5=Like a Little, 6= Like Moderately, and 7= Like Strongly. The instrument is available online, and the musical clips can be obtained by emailing the Cambridge Personality and Social Dynamics Research Group. According to this Research Group, the

---

[334] Rentfrow and Gosling, "The Do Re Mi's," 1245.

[335] Bonneville-Roussy et al, "Music Through the Ages," 707.

original version of STOMP acknowledged four musical-preference elements, but succeeding

examinations insinuate that five factors supply a better fit.[336] The STOMP-R initially scored all

twenty-three items; however, newer studies do not include the Oldies and the Soundtrack genres.

According to Bonneville-Roussy et al., these two genres might be viewed differently by

participants of different ages; therefore, the researchers only included the other twenty-one

items.[337] Davenport and North also used the STOMP-R without these two items to complete their

analyses.[338] Based on this adaptation of twenty-one items, the lowest possible survey score is

twenty-one, and the highest is one hundred and forty-seven. Administration of the survey

requires approximately forty minutes. For this study, the researcher entered the items and

musical clips into a Google Form and combined them with the Classroom Climate

Questionnaire- Secondary. A copy of the STOMP-R is in Appendix A.

<div style="text-align:center">Classroom Climate Questionnaire - Secondary</div>

The National School Improvement Partnership (NSIP) was founded in 2017 and housed

at Curtin University in Western Australia. The NSIP created the Classroom Climate

Questionnaire as part of a survey suite designed to study school environments.[339] The NSIP

developed five reliable versions of the Classroom Climate Questionnaire for use from pre-

primary to twelfth grade.[340] The CCQ was designed to measure the "malleable aspects of the

---

[336] "STOMP-R".

[337] Bonneville-Roussy et al, "Music Through the Ages," 707.

[338] Davenport and North, "Predicting Musical Taste," 837.

[339] National School Improvement Partnerships, "NSI Partnerships 2023 Overview," Curtin University (2023): 2, https://www.nsipartnerships.com.au/.

[340] Ibid., 8.

learning environment and assesses the quality of the relationships, delivery, and assessment."[341]

The CCQ also allows students to share their ideal classroom environment. [342] The survey can

also be administered to discover ways to help schools gather information regarding perceptions

of classroom climates and the overall school climate. [343] The researcher administered the CCQ-

Secondary for this study.

Each version of the Classroom Climate Questionnaire has been validated and adjusted for

the age group in which it was intended. In 2017, Aldridge and Galos developed the CCQ-

Primary to analyze student perceptions of the learning environment at the primary level to meet

the needs of schools and teachers.[344] The researchers evaluated appropriate literature and adapted

items for the scales. Aldridge and Galos pilot-tested the CCQ-P with 30 students in one class. [345]

The researchers established construct validity and reliability for the survey resulting in the CCQ-

P as an appropriate instrument to analyze classroom climate.[346] In 2019, Cimpian, Maricutoiu,

and Ilie dispensed the CCQ-P to survey 1,003 students at the primary, middle, and high school

levels in Romania to understand the validity of the survey.[347] The results established the factor

[341] "Classroom Climate Questionnaire (CCQ)," Surveys, National School Improvement Partnerships, accessed May 10, 2023, https://www.nsipartnerships.com.au/surveys/classroom-climate-questionnaire/.

[342] "Classroom Climate Questionnaire (CCQ)," Surveys, National School Improvement Partnerships, accessed May 10, 2023, https://www.nsipartnerships.com.au/surveys/classroom-climate-questionnaire/.

[343] Ibid.

[344] Jill M. Aldridge and Siobhan Galos, "Development and Validation of an Instrument to Assess Primary School Students' Perceptions of the Learning Environment," *Learning Environment Research* 21 (2018): 349, https://doi.org/10.1007/s10984-017-9248-7.

[345] Aldridge and Galos, "Development and Validation," 352.

[346] Ibid., 364.

[347] Mihaela Cimpian, Laurentiu P. Maricutoiu, and Marian D. Ilie, "Measuring Classroom Climate: Validation of the CCQ-P for Primary, Middle School and High School Levels, on the Romanian Population," *Studies in Educational Evaluation* 68 (2021): 1, https://doi.org/10.1016/j.stueduc.2021.100976.

validity of the CCQ-P at primary and secondary levels, confirming the effectiveness of the CCQ

as a tool for measuring classroom climate at all ages, pre-primary through secondary.[348] In 2021,

Aldridge and Bianchet conducted a case study of one high school teacher and her Italian classes

at the secondary level.[349] The researchers utilized the CCQ-S to discover the student perception

of the learning environment.[350] The survey was administered to twenty-five year eight students

and eighteen year ten students.[351] The results indicated that the CCQ-S is practical for teachers

who wish to improve student perception of the learning environment.[352]

 The CCQ-S is a valid and reliable instrument. Cimpian, Maricutoiu, and Ilie established

the factor validity of the CCQ at primary and secondary levels.[353] Aldridge and Galos stated that

"the multivariate normality and sampling adequacy of the data were examined" for the CCQ-

P."[354] According to the researchers, "Bartlett's test of sphericity indicated that the Chi-square

value was statistically significant ($p < 0.001$) for both the actual version (v2 = 15570.554) and

the preferred version (v2 = 18552.001)."[355] To establish validity appropriately, the researchers

examined to determine content, face, and criterion validity. Details related to the CCQ-P validity

are displayed in Table 3.2 (Appendix B).

---

[348] Cimpian, Maricutoiu, and Ilie, "Measuring Classroom Climate," 9.

[349] Jill M. Aldridge and Silvana Bianchet, "Using Student Feedback About the Learning Environment as a Starting Point for Co-Construction," *Learning Environments Research* 25, no. 3 (2022): 942.

[350] Ibid., 943.

[351] Ibid., 942.

[352] Ibid., 952.

[353] Cimpian, Maricutoiu, and Ilie, "Measuring Classroom Climate," 9.

[354] Aldridge and Galos, "Development and Validation," 357.

[355] Ibid., 357.

Aldridge and Galos defined Cronbach's alpha coefficient to determine the reliability of the CCQ-P. See Table 3.3 for results.

Table 3.3 Internal consistency reliability (Cronbach alpha coefficient) for CCQ-P

Scale	Unit of analysis	Cronbach alpha coefficient		ANOVA results (Eta^2)
		Actual	Preferred	Actual
Student Cohesiveness	Individual	0.81	0.85	.07*
	Class mean	0.82	0.89	
Teacher Support	Individual	0.84	0.83	.20**
	Class mean	0.93	0.82	
Equity	Individual	0.88	0.89	.12**
	Class mean	0.92	0.89	
Task Clarity	Individual	0.88	0.92	.09**
	Class mean	0.9	0.93	
Responsibility for Learning	Individual	0.82	0.83	.10**
	Class mean	0.78	0.86	
Involvement	Individual	0.87	0.9	.09**
	Class mean	0.91	0.93	
Task Orientation	Individual	0.84	0.89	.05**
	Class mean	0.89	0.93	
Personal Relevance	Individual	0.91	0.92	.12**
	Class mean	0.92	0.94	
Collaboration	Individual	0.82	0.87	.10**
	Class mean	0.88	0.89	

Source: Data adapted from Aldridge, Jill M., and Siobhan Galos, "Development and Validation of an Instrument to Assess Primary School Students' Perceptions of the Learning Environment," *Learning Environment Research* 21 (2018): table 2, https://doi.org/10.1007/s10984-017-9248-7.

Note. "$N = 609$ students in 31 classes. * $p < 0.05$, ** $p < 0.01$"[356]

The researcher administered the Classroom Climate Questionnaire Secondary for this study. The instrument comprises eighty questions divided into two main sections: *Learning*

---

[356] Aldridge and Galos, "Development and Validation," 361.

Environment Scales (fifty-five) and *Motivation and Engagement* (twenty-five). The researcher

can score the CCQ-S using the method most advantageous for the study. Each question utilizes a

Likert-type measurement scale: 1 = Almost Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 =

Almost Always. The lowest possible score is eighty, which indicated a mostly negative

perception, and the highest possible score is 400, which indicated a mostly positive perception.

The NSIP uses the Classroom Climate Questionnaire as a pre-test and post-test to verify teacher

improvements in the classroom climate and student perception.[357] For this study, the researcher

administered the CCQ-S to students through a Google Form in conjunction with the questions

from the STOMP-R. The survey took approximately twenty-seven minutes to complete the

CCQ- S portion of the Google Form. The NSIP controls the Classroom Climate Questionnaire

through Curtin University. To utilize the survey for this study, the researcher signed a Non-

Disclosure Agreement (NDA), and a copy of the NDA is in Appendix B.

Procedures

The research site granted permission to the researcher before conducting the study

(Appendix C). Next, the Liberty University Institutional Review Board (IRB) approved the study

(Appendix D). Within the IRB application, the researcher produced a *Child Assent to Participate*

in a Research Study form and a *Parental Opt-Out* form (Appendix E and F). The researcher

provided these forms to the middle school choir director along with digitized versions of the

forms shared via Google Drive. The researcher instructed the choir director to distribute both

forms to students and read each form aloud during class one week before distributing the survey.

Next, the researcher sent the choir director a recruitment email with the attached forms to all

---

[357] National School Improvement Partnerships, "NSI Partnerships 2023 Overview," 8.

parents and guardians in choir class so that every parent and guardian was informed of the study (Appendix H). Students whose parents did not grant permission to complete the survey were responsible for submitting the *Parental Opt-Out* forms before the choir director administered the survey. One week after the director gave out the assent and opt-out forms, students completed the survey on their school Chromebook during choir class time.

The researcher digitized the CCQ-S and the STOMP-R in addition to the two demographic questions and the classroom configuration question. The research also imported the musical clips from their original Excel document to Google Drive to link them to the Google Form. The researcher typed both instruments into one Google Form so that students could efficiently complete both surveys simultaneously. The two demographic questions and the classroom configuration question, each from the CCQ-S and the STOMP-R were copied from the original surveys and pasted into the Google Form. The researcher planned the Google Form with six sections, and students had to select an answer for each question before moving on to the next section. The response choices ranged from three to seven options based on the question. The students could not submit the survey without answering all questions. If students decided they did not want to complete the survey, they only had to close the tab on their computer and inform the director.

Students could see how many sections remained in a progress bar at the bottom of the page as they completed the Google Form. The first section included the demographic questions. The first demographic question was, "What grade are you in?" Students selected only one answer: Sixth, Seventh, or Eighth. The second demographic question was, "How old are you?" Students selected only one answer: Ten, Eleven, Twelve, Thirteen, or Fourteen. The third question involved classroom configuration. Students selected only one answer: Chairs only,

risers only, or chairs on risers. Each answer was combined with a diagram of each option. Once students answered these questions, they clicked the "next" button to navigate to the next section.

The researcher divided the CCQ-S into four sections to remove anxiety and stress the students might have felt with the survey length. The second section comprised sixteen questions of the CCQ-S. Instructions at the start of the section informed students to respond with the Likert-type scale response options: 1= Almost Never, 2= Rarely, 3= Sometimes, 4= Often, and 5= Almost Always. After responding to the sixteen CCQ-S questions, the students clicked the "next" button to navigate to the third section. The third section was comprised of questions seventeen through thirty-six of the CCQ-S. After answering all questions, the students clicked the "next" button to move to the fourth section. The fourth section included questions thirty-seven to fifty-five of the CCQ-S. Upon completion, the students clicked the "next" button to move to the fifth and final section of the CCQ-S. The students answered questions fifty-six through eighty of the CCQ-S questions and then clicked "next" to navigate to the next section.

The researcher then typed each genre comprised in the STOMP-R for the sixth section of the Google Form. This section included Likert-scale response options in the instructions: 1= Dislike Strongly, 2= Moderately Dislike, 3= Dislike a Little, 4= Neither like nor dislike, 5=Like a Little, 6= Like Moderately, and 7= Like Strongly. Each question required students to click on the genre link and listen to the clip before answering each question. After answering one hundred and one questions, students clicked "submit" to finish the survey. Students then received a confirmation message stating, "Thank you for participating in this research study. Your response has been recorded." Next, students exited the web browser to close the survey. Survey data were stored on a password-protected computer that only the researcher could access and automatically loaded into a Google Sheet.

Data Analysis

The current quantitative correlational study requires a multiple linear regression to analyze the potential significant relationships between classroom atmosphere, repertoire selection, and classroom configuration. The multiple regression analysis aimed to determine whether the predictor variables, repertoire selection, and classroom configuration, could be combined with the criterion variable of classroom atmosphere to form the best prediction model. Multiple linear regression is an appropriate research model for this study because it was conducted to determine the correlation between at least two predictor variables and one criterion variable.[358]

Similar studies also conducted multiple linear regression analyses. Burak and Atabek conducted a multiple linear regression analysis to discover the relationship between stress levels, depression, and job satisfaction.[359] The results disclosed that "there were no significant differences in the levels of perceived stress ($p = 0.985$), depression ($p = 0.251$), or career satisfaction ($p = 0.312$)."[360] Gonzalez-Moreno also implemented a multiple regression analysis to decipher a correlational relationship between college music students' perception of environmental factors and their academic experience.[361] The results of the "linear combination of the negative and positive environmental factors: $R^2 = 0.24$."[362] For multiple linear regression, the

---

[358] Gall, Gall, and Borg, *Educational Research: An Introduction,* 340.

[359] Sabahat Burak and Oguzhan Atabek, "Association of Career Satisfaction with Stress and Depression: The Case of Preservice Music Teachers," *Journal of Education and Learning* 8, no. 5 (2019): 127. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1229235&site=ehost-live&scope=site.

[360] Ibid., 128.

[361] Patricia Adelaida Gonzalez-Moreno, "Student Motivation in Graduate Music Programmes: An Examination of Personal and Environmental Factors," *Music Education Research* 14, no. 1 (2012): 97. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ960290&site=ehost-live&scope=site.

[362] Ibid., 95.

sample size of 117 surpasses the required minimum of 66 when assuming a medium effect size with a statistical power of 0.7, $\alpha = 0.05$.

There are three assumptions required for multiple linear regression. The first assumption is the lack of bivariate outliers. The researcher constructed scatter plots between all pairs of independent variables (x, x) and the predictor variables (x), and the criterion variable (y) to apply the assumption of bivariate outliers. Next, the researcher examined the scatterplots for extreme bivariate outliers. The following assumption is normal multivariate distribution. The researcher examines scatterplots for a linear relationship between each pair of variables by applying a line of best fit. If the variables are not linearly related, the power of the test is reduced. The ideal distribution for the assumption of a multivariate normal distribution is the appearance of what can be called the classic cigar shape around the line of best fit. The final assumption is non-multicollinearity or the absence of multicollinearity among the predictor variables. The researcher investigated whether a predictor variable (x) is highly correlated with another predictor variable (x) as they provide the same information regarding the criterion variable. If the variance inflation factor (VIF) is too high, more significant than ten, then multicollinearity is present, and this assumption is untenable. Acceptable values in this assumption are between one and five, meaning the assumption is tenable.

The researcher conducted measures of central tendency, after all assumptions had been tested, followed by multiple linear regression to examine the potential predictive relationship between repertoire selection, the classroom configuration, and the middle school choir classroom atmosphere. The p statistic determined significance, and the R^2 ratio was reported to determine relation to the critical value of $\alpha = 0.05$. The effect size was calculated by Cohen's f^2 and was

reported as either small ($f^2 \geq 0.01$), medium ($f^2 \geq 0.25$), or large ($f^2 \geq 0.40$). Based on the

analysis results, the null hypothesis should be rejected at the 95% confidence level.

Chapter Four: Research Findings

Overview

This chapter details the results of the data analysis for this study. This quantitative, non-experimental, predictive correlational study examined the potential relationship between classroom configuration and repertoire selection on student perspectives of the middle school choir classroom atmosphere. This chapter analyzes the two predictor variables and one criterion variable, along with descriptive statistics, assumptions, and the results of the statistics. The chapter concludes with a summary indicating whether the hypothesis was rejected or failed to be rejected.

Descriptive Statistics

The participants in this study included middle school choir students enrolled in a public middle school in a Northeast Georgia school system. The researcher sampled 117 participants, which met the required minimum sample size when assuming a medium effect size with the statistical power of .7, $\alpha = .05$.[363] The researcher downloaded data from the CCQ-S and STOMP-R as a Statistical Package for the Social Sciences (SPSS) dataset.

Descriptive statistics for the predictor variables of classroom configuration and repertoire selection and the criterion variable of student perspectives of the middle school choir classroom atmosphere are provided in Table 4.1. The eighty questions of the CCQ-S comprise the data related to classroom atmosphere (Atmosphere Score), the question related to classroom configuration is listed next, and the twenty-one STOMP-R questions comprise the data related to repertoire selection.

---

[363] Gall, Gall, and Borg, *Educational Research: An Introduction,* 143.

Table 4.1 Descriptive Statistics

	Mean	Std. Deviation
Atmosphere Score	363.23	36.867
Configuration	3	0
Alternative	4.66	1.723
Bluegrass	3.66	1.733
Blues	3.66	1.792
Classical	4.29	1.88
Country	4.89	2.22
Electronica	4.09	1.6
Folk	4.06	1.743
Funk	4.88	1.762
Gospel	5.17	1.787
Heavy Metal	3.62	2.096
World Music	3.71	1.88
Jazz	4.47	1.632
New Age	4.05	1.736
Opera	3.47	1.836
Pop	5.78	1.301
Punk	3.91	1.784
Rap	4.62	1.999
Reggae	4.6	1.747
Religious	4.93	1.809
Rock	4.34	1.844
Soul	4.58	1.566

$N = 117$ students that participated in the study. Within Table 4.1, the standard deviation for repertoire selection indicate that pop, gospel, and religious had the highest mean indicating that students like these musical clips the most. There is no standard deviation for classroom configuration as all participants chose selection three indicating the chairs on risers configuration. The standard deviation for country in repertoire selection was the highest. This indicates that students had significant variability in how they responded to this clip.

Assumptions Testing

Before conducting a multiple regression, the researcher tested three assumptions for a multiple linear regression. The assumptions included the absence of bivariate outliers, multivariate normal distribution, and non-multicollinearity. Using SPSS, the assumptions resulted in one violation.

The researcher first created scatter plots using SPSS to first test the assumption of bivariate outliers. Five scatter plots were constructed to view all pairs of independent variables (x, x) and the predictor variables (x) and criterion variable (y) (Figures 4.1 to 4.5). With each scatter plot, the researcher added the line of best fit to identify possible extreme bivariate outliers. The scatter plots were evenly dispersed with no extreme outliers; therefore, the assumption of bivariate outliers is tenable.

The researcher applied the scatter plots to identify the linear relationship between each pair of variables. The researcher visually inspected the scatter plots to check the assumption of multivariate normal distribution. Inspection revealed that the distribution lacked the desired classic shape of a cigar and thus violated the assumption of multivariate normal distribution presented (See Figures 4.1 to 4.5). Based on the research conducted by Lüdtke, Robitzsch, and West, it is still possible to continue and maintain valid results despite one violation in a multiple regression model.[364] Within the article, the researchers demonstrated "a model-based treatment of missing data for regression models with nonlinear effects and different types of predictor

---

[364] Oliver Lüdtke, Alexander Robitzsch, and Stephen G. West, "Analysis of Interactions and Nonlinear Effects with Missing Data: A Factored Regression Modeling Approach Using Maximum Likelihood Estimation," *Multivariate Behavioral Research* 55, no. 3 (2020): 361, https://doi.org/10.1080/00273171.2019.1640104.

variables."[365] They also state that this "approach produced valid parameter estimates for

regression models with incomplete predictors."[366]
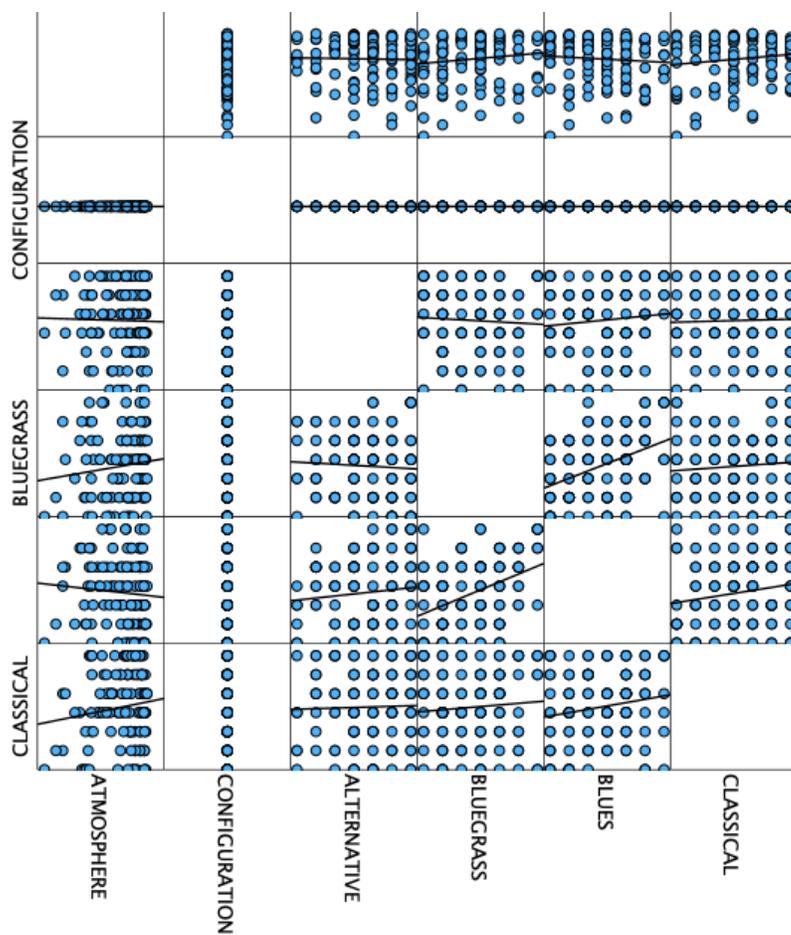
Figure 4.1. Scatterplot Matrix. Atmosphere Score, Classroom Configuration, Alternative, Bluegrass, Blues, and Classical

---

[365] Lüdtke, Robitzsch, and West, "Analysis of Interactions," 376.

[366] Ibid.
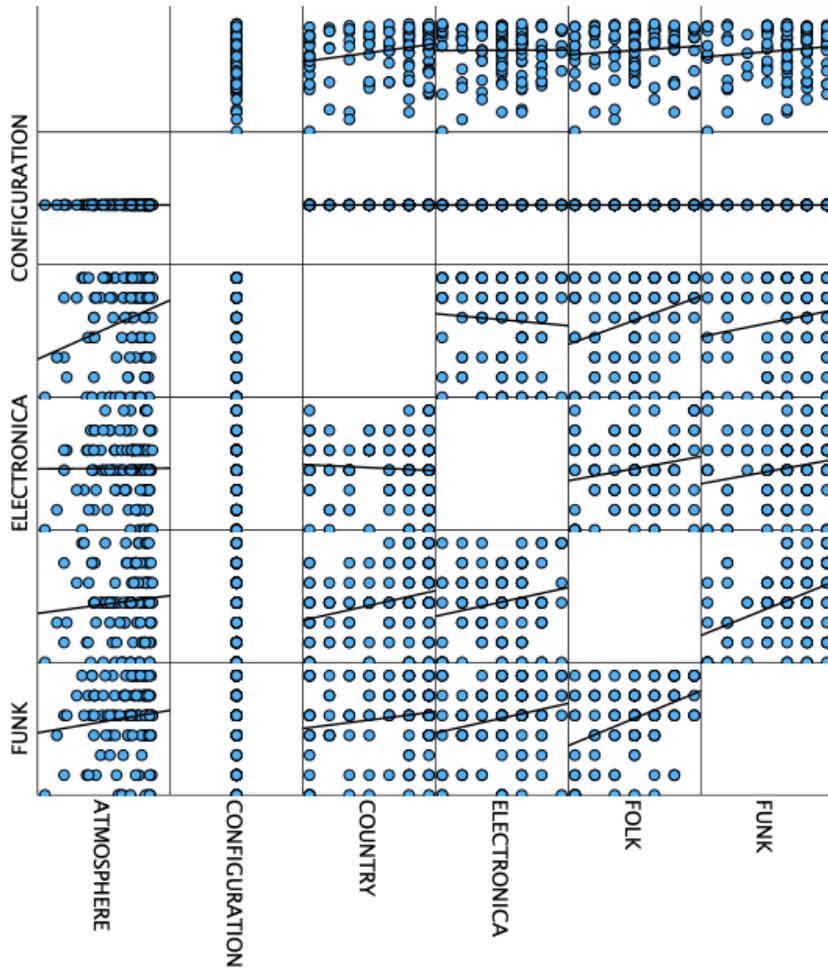
Figure 4.2. Scatterplot Matrix. Atmosphere Score, Classroom Configuration, Country, Electronica, Folk, and Funk
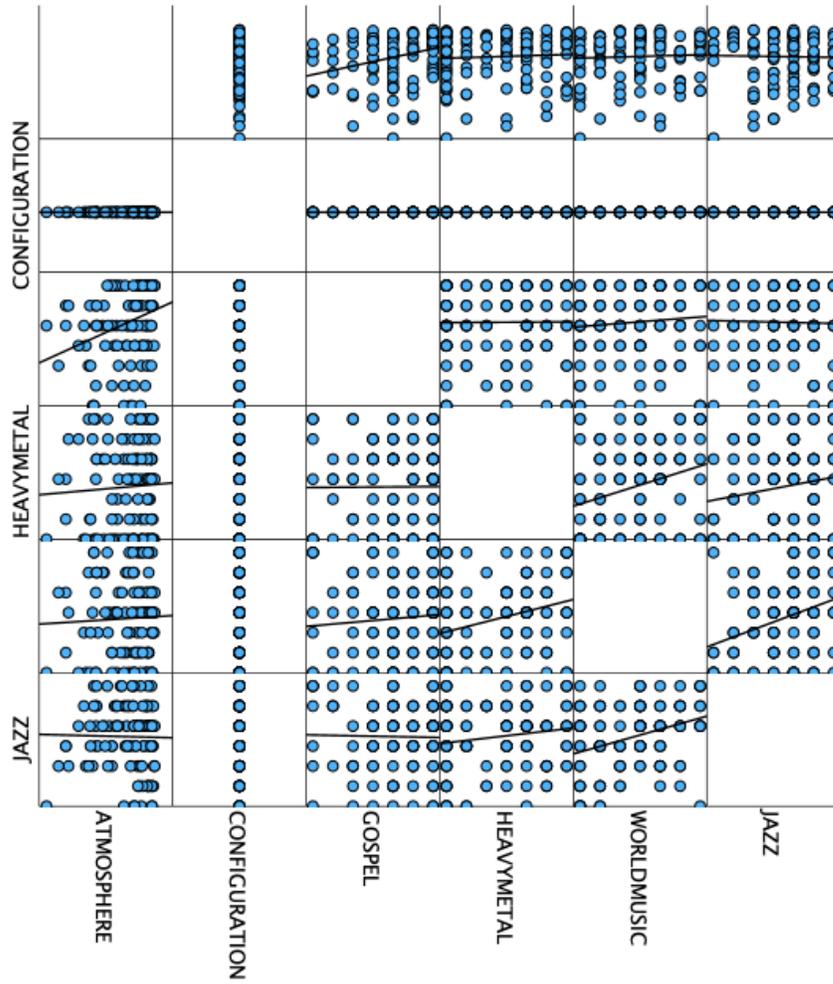
Figure 4.3. Scatterplot Matrix. Atmosphere Score, Classroom Configuration, Gospel, Heavy Metal, World Music, and Jazz
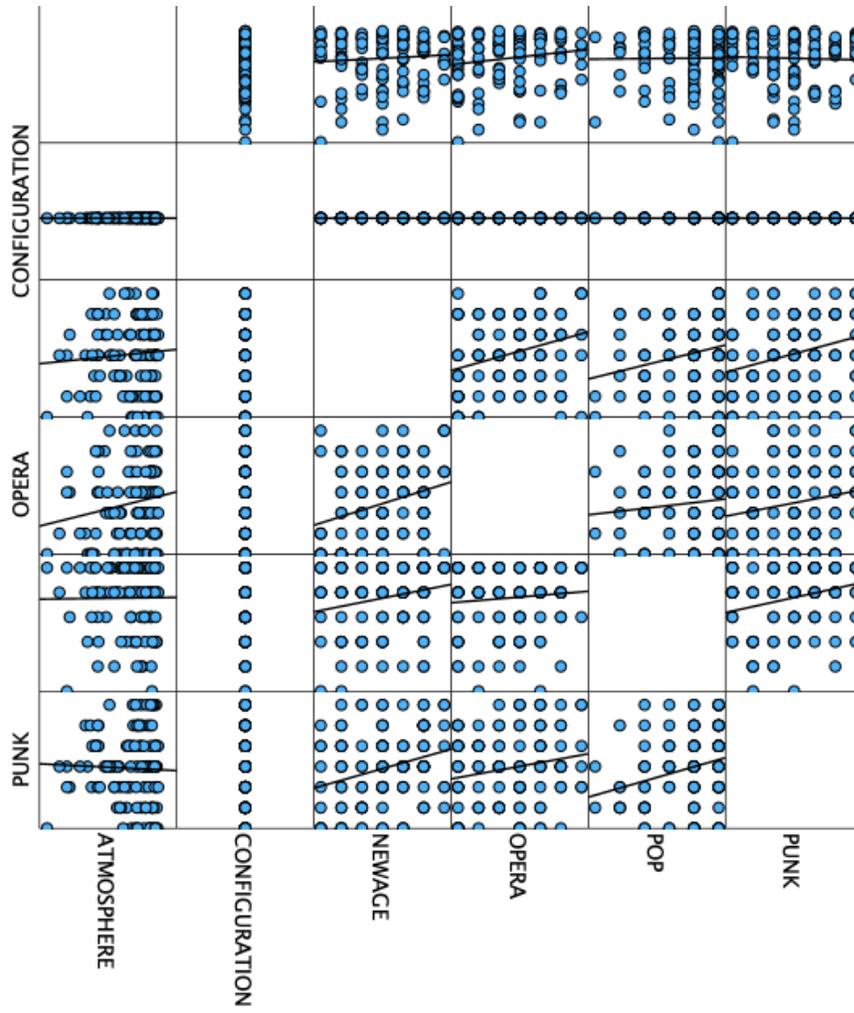
Figure 4.4. Scatterplot Matrix. Atmosphere Score, Classroom Configuration, New Age, Opera, Pop, and Punk
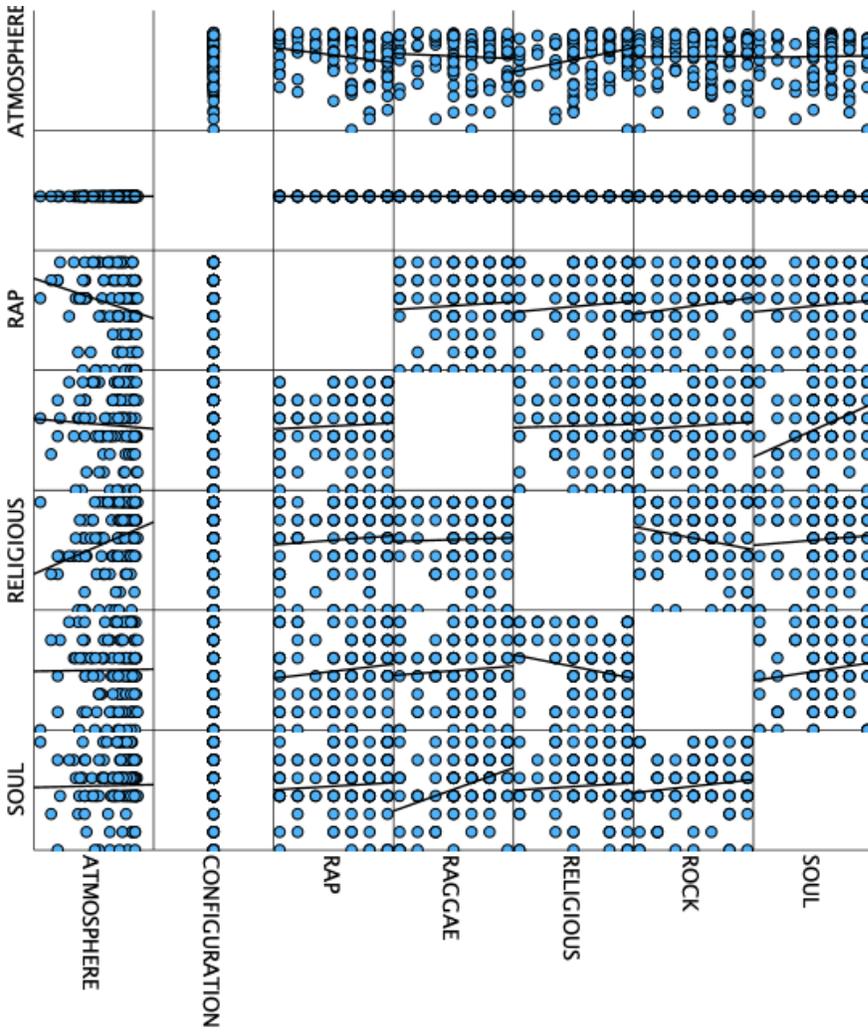
Figure 4.5. Scatterplot Matrix. Atmosphere Score, Classroom Configuration, Rap, Reggae, Religious, Rock, and Soul

The researcher tested the variance of inflation factor (VIF) to assess the assumption of non-multicollinearity (Table 4.2). All VIF scores remained between one and five, and no scores were greater than ten. This signifies that the assumption of non-multicollinearity is tenable.

Table 4.2 Collinearity Statistics

Model	Tolerance	VIF
Alternative	0.662	1.51
Bluegrass	0.584	1.712
Blues	0.584	1.714
Classical	0.543	1.842
Country	0.554	1.805
Electronica	0.585	1.71
Folk	0.653	1.532
Funk	0.621	1.61
Gospel	0.598	1.671
Heavy Metal	0.471	2.123
World Music	0.564	1.772
Jazz	0.56	1.786
New Age	0.624	1.603
Opera	0.583	1.715
Pop	0.716	1.397
Punk	0.401	2.496
Rap	0.781	1.281
Reggae	0.614	1.628
Religious	0.515	1.942
Rock	0.504	1.982
Soul	0.656	1.525

Results

A multiple linear regression was conducted to test the null hypotheses:

$H_0 1$: There is no significant predictive relationship between classroom configuration and teacher repertoire selection and middle school choir classroom atmosphere.

The overall regression displayed that the model explained $R^2 = .281$, or 28.1 percent of

the variance (Table 4.3). Therefore, 28.1 percent of the change in the criterion variable of

classroom atmosphere can be defined by the model's linear combination of classroom

configuration and repertoire selection.

Table 4.3 Model Summary[b]

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.530[a]	0.281	0.122	34.551

The researcher examined the Analysis of Variance (ANOVA) to determine the statistical

significance of the overall model (Table 4.4). The model was statistically significant, $p = 0.034$.

Therefore, the model is significant, and the predictor variables, classroom configuration, and

repertoire selection affect change in the criterion variable of classroom atmosphere.

Table 4.4 ANOVA[a]

Model		df	Mean Square	F	p
	Regression	21	2107.131	1.765	0.034[b]
1	Residual	95	1193.8		

The results in the coefficients table (Table 4.5) indicated that the repertoire selection

predictor variable had only one item, rap, that significantly affected the student perspectives of

classroom atmosphere ($p < 0.021$). Several repertoire selection categories are trending towards

significance, like religious ($p < 0.061$), reggae ($p < 0.063$), and opera ($p < 0.076$). All other

repertoire selection items in the table are not considered significant.

Table 4.5 Coefficients[a]

Mode l		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	321.415	23.332		13.776	<.001
	Alternative	1.051	2.288	0.049	0.459	0.647
	Bluegrass	0.842	2.422	0.04	0.348	0.729
	Blues	-3.029	2.344	-0.147	-1.292	0.199
	Classical	3.058	2.315	0.156	1.321	0.19
	Country	1.203	1.942	0.072	0.62	0.537
	Electronica	2.221	2.621	0.096	0.847	0.399
	Folk	-0.682	2.278	-0.032	-0.299	0.765
	Funk	2.668	2.31	0.128	1.155	0.251
	Gospel	3.62	2.32	0.176	1.56	0.122
	Heavy Metal	-0.628	2.23	-0.036	-0.282	0.779
	World Music	-1.568	2.271	-0.8	-0.69	0.492
	Jazz	-1.36	2.626	-0.6	-0.519	0.605
	New Age	-0.224	2.339	-0.11	-0.096	0.924
	Opera	4.105	2.288	0.204	1.794	0.076
	Pop	-1.721	2.915	-0.061	-0.59	0.556
	Punk	-0.334	2.841	-0.016	-0.117	0.907
	Rap	-4.261	1.817	-0.231	-2.346	0.021
	Reggae	-4.405	2.343	-0.209	-1.88	0.063
	Religious	4.695	2.471	0.23	1.9	0.061
	Rock	3.202	2.45	0.16	1.307	0.194
	Soul	0.625	2.53	0.027	0.247	0.805

The null hypothesis was rejected at the 95 percent confidence level based on the results of the multiple regression. Based on the significance, repertoire selection and classroom configuration designate a change in middle school student perspectives pertaining to their perception of the choir classroom atmosphere. The researcher calculated Cohen's f^2 to measure the effect size. Cohen's f^2 is the square root of $R^2 / (1 - R^2)$. Based on Table 4.3, $R^2 = 0.281$.

Therefore, Cohen's f^2 for this model is the square root of $0.281 / .719 = 0.3908$, with the square root $= 0.625$. Cohen describes small ($f^2 \geq 0.01$), medium ($f^2 \geq 0.25$), and large ($f^2 \geq 0.40$) effect sizes. The results of this study produced a large effect size (0.625) on the overall population of middle school students. Cohen's f^2 demonstrates that the predictor variables affect the criterion variable.

Summary

This quantitative, predictive correlational study aimed to examine the potential predictive relationship between repertoire selection and classroom atmosphere on student perspectives of the middle school choir classroom atmosphere. The results of the multiple linear regression demonstrate a significant predictive model. The researcher analyzed to describe the statistics, assumptions, and results of the statistics. Chapter Five continues with a discussion of how the researcher interpreted the results of this study in the context of the theoretical framework, the limitations, and the study's results.

Chapter Five: Conclusions

Overview

This chapter examines the effects of the results of this quantitative, predictive correlational study of the relationship between repertoire selection and classroom configuration on student perceptions of the middle school choir classroom atmosphere. The researcher also discusses conclusions based on the results of this study. The researcher collected data from middle school choir students in Northeast Georgia via a Google Form to discover the relationship between the predictor and criterion variables. The data were collected and analyzed in the spring of 2023. This chapter discusses the research results, implications of the study results, limitations of this study, and recommendations for future research.

Summary of Findings and Prior Research

This quantitative, non-experimental predictive correlational study aimed to analyze the relationship between repertoire selection and classroom configuration on student perception of the middle school choir classroom atmosphere. The predictor variables for this study were repertoire selection and classroom configuration, and the criterion variable was the atmosphere of the middle school choir classroom. Repertoire selection was assessed using the STOMP-R survey, and the classroom atmosphere score resulted from the questions from the CCQ-S. Participants also chose the classroom configuration diagram that best fit their current middle school choir classroom configuration. The researcher collected all questions, which were put together in one Google Form to reduce anxiety and stress for participants to complete.

The research question was designed to address the accuracy of the linear combination of student perception of the middle school choir classroom atmosphere and teacher repertoire selection and classroom configuration. The null hypothesis stated that there would be no

significant predictive relationship between the criterion variable, classroom atmosphere, and the linear combination of predictor variables, including repertoire selection and classroom configuration. The researcher rejected the null hypothesis based on multiple linear regression analysis results. The results concluded that the overall regression was statistically significant (R^2 = .281, p = 0.034). The regression model results of R^2 = .281 indicated that the effect size of students' perception of assessment on student achievement is significant. This signifies that the linear combination of the predictor variables, classroom configuration, and repertoire selection in the model can define 28.1 percent of the change in the criterion variable of classroom atmosphere.

Many studies include classroom configuration, repertoire selection, and student perception of classroom atmosphere, but no studies look at all three elements together. However, there is research that is similar to the current study. The results of this study aligned with Gonzalez-Moreno and her research. Gonzalez-Moreno also implemented a multiple regression analysis to learn about student perception of environmental factors and academic experience at the collegiate level.[367] The study indicated significant results, and Gonzalez Moreno concluded that in her words "the strongest predictor for students' values is the perception of positive environmental characteristics in the programme."[368] Burak and Atabek also conducted a multiple linear regression study to examine the relationship between stress level, depression, and job satisfaction at the collegiate level.[369] Burak and Atabek found a significant relationship between stress levels and depression and lower job satisfaction.[370] Devenport and North utilized two

---

[367] Gonzalez-Moreno, "Student Motivation in Graduate Music Programmes," 97.

[368] Ibid., 96.

[369] Burak and Atabek, "Association of Career Satisfaction," 127.

[370] Ibid., 130.

aspects of this study. The researchers conducted a multiple linear regression study and administered the STOMP-R questionnaire like this study.[371] Devenport and North administered the STOMP-R to examine personality domains, while the current study administered the STOMP-R to discover relationships regarding repertoire selection. They discovered a significant relationship between musical preference and personality in three of four domains.[372] Hedden and Allen examined repertoire selection like this study, except they engaged a mixed methods approach.[373] The researchers learned that a significant percentage of the participants chose repertoire before rehearsals began.[374] Based on these results, the only consistent element between the qualitative and quantitative portions was that text is most important when directors selected repertoire.[375] This study did not examine repertoire selection aspects but investigated student perception.

Brukštutė studied the history of how teachers organized their classrooms at the secondary level.[376] This study only included student perception of the classroom configuration in a middle school choir classroom while Brukštutė investigated teacher perception.[377] Her results were similar: both indicate that the teacher chooses classroom configuration. Berg and Antonious suggest that attention to the physical configuration of the classroom could provide knowledge for effective classroom management to create positive student relationships at the middle school

---

[371] Devenport and North, "Predicting Musical Taste," 835.

[372] Ibid., 845.

[373] Hedden and Allen, "Conductor's Literature Selection," 6.

[374] Ibid., 7.

[375] Ibid., 18.

[376] Brukštutė, "Physical Classroom Environment," 39.

[377] Ibid., 40.

level.[378] Berg and Antonious and this study indicate that classroom configuration influences student perception of the classroom environment. Lizzio, Wilson, and Simons investigated student perception of the classroom atmosphere at the collegiate level when entering a subject area that the students do not feel they know well.[379] Lizzio, Wilson, and Simons and this study both show a significant relationship between student perception of the classroom atmosphere and other predictor variables, further illustrating the importance of understanding students' perceptions of the classroom environment. Lizzio, Wilson, and Simons investigated the significance of classroom atmosphere with predictor variables of study approaches and academic success rate.[380] This study combined classroom atmosphere with repertoire selection and classroom configuration.

Alonso-Tapia and Ruiz-Diaz applied a similar survey to this study, the Classroom Motivational Climate Survey (CMC), to predict teacher perception of the atmosphere.[381] They also applied a multiple regression to discover if there was a relationship between teacher perception of classroom atmosphere and other classroom motivational predictor variables.[382] Alonso-Tapia and Ruiz-Diaz provided a result trending towards significance, while this study indicated a significant result. The research Papageorgi and Stavrou conducted was the most similar to this study. Papageorgi and Stavrou surveyed secondary students to discover student perceptions of the music classroom.[383] The researcher discovered a significant result related to a

---

[378] Berg and Antonious, "Peer Status and Classroom Seating Arrangements" 32.

[379] Lizzio, Wilson, and Simons, "University Students' Perceptions of the Learning Environment," 35.

[380] Ibid., 34.

[381] Alonso-Tapia and Ruiz-Diaz, "School Climate," 154.

[382] Ibid., 159.

[383] Papageorgi and Stavrou, "Student Perceptions," 3.

positive perception of the music classroom environment.[384]This study also showed significance between the classroom atmosphere and the predictor variables.

There is consistency in the results of studies examining the predictive relationship between perception and classroom atmosphere, as evidenced by past research findings. This current research advances these studies supporting that a relationship exists between students' perception of classroom environment, classroom configuration, and repertoire selection. The current findings further develop past research by identifying areas where classroom configuration and repertoire selection should be improved to affect student learning.

<div align="center">Implications for Practice</div>

The study findings identified a significant relationship between student's perceptions of the middle school choir classroom atmosphere and repertoire selection and classroom configuration. Based Bronfenbrenner's ecological systems theory, students perform better in a supportive classroom environment during the middle school years.[385] The results of this study indicate a significant correlation between the predictor variables and the criterion variable, with some elements trending toward significance. The linear combination of both predictors demonstrates that understanding students' perceptions of the classroom environment, classroom configuration and repertoire selection decisions can influence learning.

Table 4.1 depicts valuable information regarding the study results. The mean atmosphere score is 363.23, and this average classroom atmosphere score indicates that students perceive the choir classroom included in this study as a positive classroom. The mean score is 36.77 points away from the highest score possible, almost the exact standard deviation of the data. The

---

[384] Papageorgi and Stavrou, "Student Perceptions," 13.

[385] Cipriano, et al., "A Multilevel Approach to Understanding," 209.

researcher examined the atmosphere score survey data and discovered that the highest score achieved was 400 by two students, and the lowest was 238 by one student.

Per Table 4.1, pop, gospel, and religious repertoire selections produced the highest means implying that students enjoyed listening to these clips the most. The lowest mean score for individual repertoire selections was opera and heavy metal, indicating students enjoyed these clips the least. However, the standard deviation for the heavy metal clip was the second highest at 2.096, implying that the range of answers for this track was the most variable. The standard deviation for country in repertoire selection was the highest at 2.22. This signifies that students maintained significant variability in responding to this clip. Middle school choir directors could implement this information to help choose repertoire based on the pop, gospel, and religious genres to elevate student perception of the choir classroom. There is no standard deviation for classroom configuration as all participants chose the chairs on risers configuration for their classroom. Participants chose this configuration because they were all enrolled at the same middle school. Therefore, no other configurations would have been chosen.

Table 4.4 includes the ANOVA information, and the model was statistically significant because $p = 0.034$. Therefore, the model is significant at 28.1 percent of the variance. This suggests that classroom configuration and repertoire selection affect change in classroom atmosphere in the middle school choir classroom. While Tobia et al. agreed that classroom configuration affects classroom atmosphere, they also state that the students' success depends on altering the configuration to fit the educational needs rather than a configuration that remains the same.[386] Middle school choir directors should consider this and sometimes change configuration based on a better fit for certain activities. Middle school choir directors should also be aware that

---

[386] Tobia et al., "The Influence of Classroom Seating," 6622.

the music selections they choose will affect the classroom atmosphere and could influence

enrollment numbers and the retention rate of their students from sixth through eighth grades.

Limitations

Some factors can potentially limit the results of the study research. Limitations of the

current study include only one school in the study population, violating the assumption of

multivariate normal distribution, and implementing a quantitative research method to gather data.

The research noted the marginal population as the first limitation of the current study. The

research met the 66 minimum sample number for multiple linear regression, but the 117

participants only represent a small number of middle school choir students. The possible

participants for the study came from one middle school in Northeast Georgia. This study did not

survey every middle school choir student in Georgia or the United States. A final limitation of

selecting participants from one school is that they chose the chairs on risers selection for

classroom configuration because all participants go to the same classroom. There was zero

standard deviation, or variety, among the data. A future study will benefit from participants from

multiple schools with several different classroom configurations to discover if the results align

with this study.

Another limitation is that this research violated the assumption of multivariate normal

distribution. The researcher discovered that the scatter plots provided in Figures 4.1 to 4.5 did

not display the classic "cigar shape" necessary for the assumption of the multivariate normal

distribution; therefore, the researcher violated the assumption. The data were not standardized

and had a greater variability of responses to produce a cigar-shaped dispersion. Instead of the

data being minor standard deviations from the mean, the survey had various responses. Lüdtke,

Robitzsch, and West stated that it is still possible to continue the study despite missing values in

the linear regression model.[387] Other researchers should conduct similar studies to examine results when this assumption is not violated.

Administering a survey for a quantitative study to gather participant responses limited the information collected from the students about the variables. Results cannot include the participants' thoughts and beliefs about the questions within a quantitative study. Gall, Gall, and Borg also state that participants cannot share their thoughts, experiences, or beliefs in a quantitative survey.[388] A quantitative research method limits the researcher's understanding of why the participants responded in a particular way. A survey provides significant information but does not offer any rationale for the information gathered.

<div align="center">Recommendations for Future Study</div>

This study provides opportunities for future study on classroom configuration, repertoire selection, and the middle school choir classroom atmosphere. The researcher offers recommendations related to the gaps in the literature and the limitations discussed. These recommendations allow other researchers to examine if the current study results are generalizable in other settings.

Future researchers should conduct similar studies that do not violate the assumption of multivariate normal distribution. While the researcher could continue despite violating this assumption, this was a study limitation. The results of the multiple linear regression could be more valid if all assumptions were tenable. Another future research opportunity is to be conducted with an alternate population or group of participants. Repeating this research with

---

[387] Lüdtke, Robitzsch, and West, "Analysis of Interactions," 361.

[388] Gall, Gall, and Borg, *Educational Research: An Introduction,* 222.

high school or collegiate choir students could produce similar or changed results. Future studies could also include choir students in many areas of Georgia or other states across the United States with larger or similar sample sizes. These alternate possibilities could exhibit results to apply to a broader collection of choir students. All students choosing the same classroom configuration diagram is another limitation of this study that would benefit from future research. A similar study could be explored by choosing participants from multiple middle schools to discover if the same results occur.

Future researchers could implement a qualitative or mixed methods study to assess the same variables. This would provide a deeper understanding of students' thoughts and experiences concerning classroom configuration, repertoire selection, and the choir classroom atmosphere. The future qualitative study including these variables could be a standard case study or a phenomenological study. Choir directors and fine arts administrators would benefit from this information as they seek to develop a positive classroom environment for choir students. College music education professors would benefit from this information as they prepare preservice teachers to make decisions about classroom configuration and repertoire selection to understand better could affect the choir classroom atmosphere. Researchers could also conduct similar studies on students' perceptions of classroom configuration and repertoire selection in other fine arts classrooms like band and orchestra.

<center>Summary</center>

The purpose of this study aimed to discover the relationship between students' perspectives of classroom configuration and repertoire selection and their effect on middle school choir classroom atmosphere. The research was influenced by Bronfenbrenner's bioecological theory of human development, Rudolph Moo's framework for evaluating

educational settings, and Zoltan Kodály's philosophy of a positive learning environment. The researcher based connections between the theories and the variables on a recent literature review. The literature review assessed the research of the variables in education, music, choir classroom, and middle school choir classroom settings.

The researcher included participants from one middle school in a Northeast Georgia public school system. The researcher administered two surveys, classroom configuration, and demographic questions in a Google Form to gather data about students' perspectives on the middle school choir classroom atmosphere. The study identified significance between the predictor variables of classroom configuration and repertoire selection and the criterion variable of classroom atmosphere. The results indicate that the predictor variables affect the criterion variable, student perspectives of the middle school choir classroom atmosphere.

This study and prior research show that consistent classroom configuration and choosing repertoire selection that students perceive positively can lead to an improved positive classroom environment. Findings also support the need to understand how students' prior experiences and beliefs affect their perceptions of the classroom atmosphere. Future research should consider how student perspectives in other fine arts courses influence social-emotional learning, teacher-student relationships, and classroom atmosphere.

Bibliography

Abell, Michael M., Eunjoo Jung, and Matthew Taylor. "Students' Perceptions of Classroom Instructional Environments in the Context of 'Universal Design for Learning." *Learning Environments Research* 14, no. 2 (2011): 171-85, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/students-perceptions-classroom-instructional/docview/890598729/se-2.

Aburas, Rehab, Kristi Gaines, and Hwang Su-Jeong. "Physical and Psychosocial Factors in Classroom Design for Elementary Level Schools." *The International Journal of Early Childhood Learning* 20, no. 4 (2014): 19-35, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/physical-psychosocial-factors-classroom-design/docview/2712914870/se-2.

Adams, K. Choral Configuration: An Overview of Research and Implications for the Choral Music Educator. Update: Applications of Research in Music Education, 37, (2019): 24–29. https://doi.org/10.1177/8755123318783526.

Albert, Daniel J. "The Classroom Culture of a Middle School Music Technology Class." *International Journal of Music Education* 38, no. 3 (August 2020): 383–99. https://doi.org/10.1177/0255761419881483.

Aldridge, J.M., Galos, S. "Development and Validation of an Instrument to Assess Primary School Students' Perceptions of the Learning Environment." *Learning Environment Research* 21, 349–368 (2018). https://doi.org/10.1007/s10984-017-9248-7

Aldridge, Jill M, and Silvana Bianchet. "Using Student Feedback About the Learning Environment as a Starting Point for Co-Construction." *Learning Environments Research* 25, no. 3 (2022): 939–955.

Aldridge, Jill M., Paul E. Rijken, and Barry J. Fraser. "Improving Learning Environments through Whole-School Collaborative Action Research." *Learning Environments Research* 24, no. 2 (2021): 183-205, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/improving-learning-environments-through-whole/docview/2537863071/se-2.

Alonso-Tapia, Jes and Miguel Ruiz-Díaz. "School Climate and Teachers' Motivational Variables: Effects on Teacher Satisfaction and Classroom Motivational Climate Perceived by Middle School Students. A Cross-Cultural Study." *Psicología Educativa* 28, no. 2 (2022): 151-63, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/school-climate-teachers-motivational-variables/docview/2700297362/se-2.

Armes, Jocelyn W. "Backward Design and Repertoire Selection: Finding Full Expression." *Music Educators Journal* 106, no. 3 (2020): 54–59. https://doi.org/10.1177/0027432119893735.

Barresi, A. L. "The Successful Middle School Choral Teacher: Technical Competence, Professional Understandings, and Personal Qualities All Seem to Play a Role in the Development of the Successful Middle School Choral Teacher." *Music Educators Journal* 86, (2000): 23–28. https://doi.org/10.2307/3399601.

Beery, Lon. "Junior High/Middle School Choirs." *The Choral Journal* 52, no. 9 (2012): 61-62, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/junior-high-middle-school-choirs/docview/1032965613/se-2.

Berg, Yvonne and Antonious Cillessen. "Peer Status and Classroom Seating Arrangements: A Social Relations Analysis." *Journal of Experimental Child Psychology* 130, (2015): 19-34.

Bonneville- Roussy, Arielle, Rentfrow, Peter J., K. Xu, Man, and Potter, Jeff. "Music Through the Ages: A Trends in Musical Engagement and Preferences from Adolescence through Middle Adulthood." Journal of Personality and Social Psychology 105, no. 4 (2013): 703–717. doi. 0.1037/a0033770.

Boshkoff, Ruth. "Lesson Planning the Kodály Way." *Music Educators Journal* 78, no. 2 (1991): 30. doi:10.2307/3398257.

Bowers, Judy. "Motivation in Middle School Choir." *The Choral Journal* 47, no. 5 (2006): 90–93. http://www.jstor.org/stable/23556303.

Bronfenbrenner, Urie. *The Ecology of Human Development: Experiments by Nature and Design.* Austin: Harvard University Press, 1979.

Brukštutė, Grėtė. "Physical Classroom Environment and Pedagogy." *Rigas Tehniskas Universitates Zinatniskie Raksti* 15, no. 1 (2019): 38-43, https://go.openathens. net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/physical-classroom-environment-pedagogy/docview/2587628391/se-2.

Burak, Sabahat, and Oguzhan Atabek. "Association of Career Satisfaction with Stress and Depression: The Case of Preservice Music Teachers." *Journal of Education and Learning* 8, no. 5 (2019): 125–35. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1229235&site=ehost-live&scope=site.

Butler, Richard P, and Clark McCauley. "Extraordinary Stability and Ordinary Predictability of Academic Success at the United States Military Academy." *Journal of Educational Psychology* 79, no. 1 (1987): 83–86.

Cai, J., Wen, Q., Lombaerts, K. et al. "Assessing Students' Perceptions about Classroom Learning Environments: The New What Is Happening in this Class (NWIHIC) Instrument." *Learning Environ Res* 25, (2022): 601-618. https://doi org.ezproxy.liberty.edu/10.1007/s10984-021-09383-w.

Caldwell, Harold L. " Review of The Kodály Context." *Music Educators Journal* 68, no. 2 (1981): 58–59. https://doi.org/10.2307/3395879.

Cavner, Delta, and Elizabeth Gould. "Whole Language in the Music Classroom: Part 1 of 2." *Music Educators Journal* 89, no. 4 (2003): 39-46. doi:10.2307/3399903.

Chung, Yu-Chi, Alinka E. Greasley, and Li-Yu Hu. "The Relationship between Musical Preferences and Type D Personality." Psychology of Music 47, no. 1 (2019): 3-17.

Cimpian, Mihaela, Laurentiu P. Maricutoiu, and Marian D. Ilie. "Measuring Classroom Climate: Validation of the CCQ-P for Primary, Middle School and High School Levels, on the Romanian Population." *Studies in Educational Evaluation* 68 (2021): 1-13, https://doi.org/10.1016/j.stueduc.2021.100976.

Cipriano, Christina, Tia N. Barnes, Kerrie A. Pieloch, Susan E. Rivers, and Marc Brackett. "A Multilevel Approach to Understanding Student and Teacher Perceptions of Classroom Support during Early Adolescence." *Learning Environments Research* 22, no. 2 (2019): 209-28, https://go.openathens.net/redirector/liberty.edu?url=https://www. proquest.com/scholarly-journals/multilevel-approach-understanding-student-teacher/docview/2104460457/se-2.

Creswell, John W., and J. David Creswell. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Los Angeles, CA: Sage Publications, Inc., 2018.

Cumberledge, J. P., & Williams, M. L. "Representation in Music: College Students' Perceptions of Ensemble Repertoire." *Research Studies in Music Education.* (2022). 1-18. https://doi.org/10.1177/1321103X211066844

Daugherty, James F. "Spacing, Formation, and Choral Sound: Preferences and Perceptions of Auditors and Choristers." *Journal of Research in Music Education* 47, no. 3 (1999): 224–38. https://doi.org/10.2307/3345781.

Daugherty, J. F., Manternach, J. N., & Brunkan, M. C. "Acoustic and Perceptual Measures of SATB Choir Performances on Two Types of Portable Choral Riser Units in Three Singer-Spacing Conditions." *International Journal of Music Education 31*, vol. 3, (2013): 359–375. https://doi.org/10.1177/0255761411434499.

Demorest, S. M. "The Challenge of the Middle School Chorus: Teaching Middle School Chorus Calls for Knowledge of the Adolescent Voice and Appropriate Repertoire." *Music Educators Journal* 86, vol. 4, (2000): 21–22. https://doi.org/10.2307/3399600

Devenport, S. P., and North, A. C. "Predicting Musical Taste: Relationships with Personality Aspects and Political Orientation." *Psychology of Music* 47, (2019). 834–847. https://doi.org/10.1177/0305735619864647.

DeVries, Peter. "Reevaluating Common Kodály Practices." *Music Educators Journal*, no. 3 (2001): 24-27, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/reevaluating-common-kodaly-practices/docview/197182041/se-2.

Draper, A. R. "Democracy in the Middle School Music Classroom." Music Educators Journal, 105, (2019): 17–22. https://doi.org/10.1177/0027432118816147.

Ekholm, E. "The Effect of Singing Mode and Seating Arrangement on Choral Blend and Overall Choral Sound." *Journal of Research in Music Education* 48, (2000): 123–135. https://doi.org/10.2307/3345571.

Engels, Maaike C. et al. "The Role of Affective Teacher-Student Relationships in Adolescents' School Engagement and Achievement Trajectories." *Learning and Instruction* 75 (2021): 1-12, https://doi.org/10.1016/j.learninstruc.2021.101485.

Fisher, R. A., Summitt, N. L., & Koziel, E. B. "A Description of Middle School Male Singers' Voice Change and Voice Part Assignment." *Applications of Research in Music Education* 40, vol. 1, (2021): 45–53. https://doi.org/10.1177/87551233211018209

Fernandes, Amanda Careena and Jinyan Huang. "Chinese Teacher Perceptions of the Impact of Classroom Seating Arrangements on Student Participation." *International Journal of Applied Educational Studies* 13, no. 1 (04, 2012): 49-67, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/chinese-teacher-perceptions-impact-classroom/docview/1033775910/se-2.

Forbes, Guy W. "The Repertoire Selection Practices of High School Choral Directors." *Journal of Research in Music Education* 49, no. 2 (2001): 102–21. https://doi.org/10.2307/3345863.

Gallo, D. J. " Professional Development Quality in U.S. Music Education: An Analysis of the 2011–2012 Schools and Staffing Survey." *Journal of Research in Music Education* 66, vol. 2, (2018): 168–189. https://doi.org/10.1177/0022429418764453.

Gong, Luxin and Jingyi Wang. "Interactive Learning Environment for Effective Music Learning in Chinese Primary and Secondary Schools." *Sustainability* 15, no. 3 (2023): 21-43, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/interactive-learning-environment-effective-music/docview/2775019575/se-2.

Gonzalez-Moreno, Patricia Adelaida. "Student Motivation in Graduate Music Programmes: An Examination of Personal and Environmental Factors." *Music Education Research* 14, no. 1 (2012): 79–102. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ960290&site=ehost-live&scope=site.

Google. "Positive Learning Environment." Positive Learning Environment. https://teaching.resources.osu.edu/teaching-topics/shaping-positive-learning

Google, "STOMP," Members and STOMP, https://www.psd.psychol.cam.ac.uk/.

Google, STOMP-R", Cambridge Projects and Measures and STOMP-R, https://www.psd. psychol.cam.ac.uk/projects-measures.

Google. "Teacher Keys, Standard 7." Positive Learning Environment. https://www.gadoe. org/School-Improvement/Teacher-and-Leader-Effectiveness/Pages/Teacher-Keys-Effectiveness-System.aspx

Goopy, Jason. "'Extra-Music al Effects' and Benefits of Programs Founded on the Kodály Philosophy." *Australian Journal of Music Education*, no. 2 (2013): 71–78. https://sear h.ebscohost.com/login.aspx?direct=true&db=ehh&AN=111963645&site=ehost-live&scope=site.

Gremmen, Mariola C., van den Berg, Yvonne H, M., Eliane Segers, Antonius H. Cillessen, and N. "Considerations for Classroom Seating Arrangements and the Role of Teacher Characteristics and Beliefs." *Social Psychology of Education: An International Journal* 19, no. 4 (12, 2016): 749-74, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/considerations-classroom-seating-arrangements/docview/1855036190/se-2.

Hartwig, Kay and Rowena Riek. "Choir in the Age of 'the Voice'." *Australian Journal of Music Education,* no. 3 (2015): 37-46, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/choir-age-voice/docview/1788570696/se-2.

Hedden, Debra G. and Ashley D. Allen. "Conductors' Literature Selection Practices for Community Children's Choirs in North America." *International Journal of Music Education* 37, no. 1 (2019): 3–21. https://doi.org/10.1177/0255761418787539.

Hird, E., & North, A. "The Relationship Between Uses of Music, Musical Taste, Age, and Life Goals." *Psychology of Music* 49, no. 4, (2021): 872–889. https://doi.org/10.1177/0305735620915247

Hopkins, Michael. "Programming in the Zone: Repertoire Selection for the Large Ensemble." *Music Educators Journal* 99, no. 4 (2013): 69-84. https://doi.org/ 10.1177/0027432113480184.

Hye-Kyoung Joe, Phil Hiver, Ali H. Al-Hoorie. "Classroom social climate, self-determined motivation, willingness to communicate, and achievement: A study of structural relationships in instructed second language settings." *Learning and Individual Differences* 53, (2017): 133-144. https://doi.org/10.1016/j.lindif.2016.11.005.

Joe Hye-Kyoung, Phil Hiver, Ali H. Al-Hoorie. "Classroom Social Climate, Self-determined Motivation, Willingness to Communicate, and Achievement: A Study of Structural

Relationships in Instructed Second Language Settings." *Learning and Individual Differences* 53, (2017): 133-144. https://doi.rg/10.1016/j.lindif.2016.11.005.

Joseph, Dawn. "Fostering a Happy Positive Learning Environment for Generalist Pre-Service Teachers: Building Confidence that Promotes Wellbeing." *British Journal of Music Education* 36, no. 2 (2019): 183-96, https://go.openathens.net/redirector/ liberty.edu?url=https://www.proquest.com/scholarly-journals/fostering-happy-positive-learning-environment/docview/2269871702/se-2.

Kallio, A. A. "Drawing a Line in Water: Constructing the School Censorship Frame in Popular Music Education." *International Journal of Music Education* 33, (2015): 195–209. https://doi.org/10.1177/0255761413515814.

Kepez, Orcun and Selin Ust. "Collaborative Design of an Active Learning Classroom with High School Students and Teachers." *International Journal of Architectural Research* 14, no. 3 (2020): 525-41, https://go.openathens.net/redirector/liberty.edu?url= https://www.proquest.com/scholarly-journals/collaborative-design-active-learning-classroom/docview/2534600960/se-2.

Kruse, N. B. "Silent Partners: Uncovering Middle School and High School Students' Perceptions of Their Roles in Two School–University Partnerships." *Update: Applications of Research in Music Education* 31, (2012): 63–71. https://doi.org/10.1177/8755123312458438.

Lee, S. "General Music Teachers' Backgrounds and Multicultural Repertoire Selection." *Update: Applications of Research in Music Education* 36, (2018): 38–44. https://doi.org/10.1177/8755123317717052.

Lizzio, Alf, Wilson, Keithia, and Roland Simons. "University Students' Perceptions of the Learning Environment and Academic Outcomes: Implications for Theory and Practice." *Studies in Higher Education,* 27, vol. 1, (2002): 27-52, doi:10.1080/03075070120099359.

Lüdtke, Oliver, Alexander Robitzsch, and Stephen G. West. "Analysis of Interactions and Nonlinear Effects with Missing Data: A Factored Regression Modeling Approach Using Maximum Likelihood Estimation." *Multivariate Behavioral Research* 55, no. 3 (2020): 361-81. https://doi.org/10.1080/00273171.2019.1640104.

MacGregor, Elizabeth H. "Conceptualizing Musical Vulnerability." *Philosophy of Music Education Review* 30, no. 1 (Spring, 2022): 24-43, https://go.openathens.net/redirector/ liberty.edu?url=https://www.proquest.com/scholarly-journals/conceptualizing-musical-vulnerability/docview/2644084107/se-2.

Moos, Rudolf H. "Evaluating Classroom Learning Environments." Studies in educational evaluation. 6, no. 3 (1980): 239–252.

Moos, Rudolph. *Evaluating Educational Environments*. San Francisco: Jossey-Bass Publishers, 1979.

Moos, Rudolf H. "A Typology of Junior High and High School Classrooms." *American Educational Research Journal* 15, no. 1 (1978): 53–66. https://doi.org/10.2307/1162687.

Moss, Brandon. "The Art of Choosing Appropriate Repertoire." *The American Organist* 8, (2018): 43, https://go.openathens.net/redirector/liberty.edu?url=https://www-proquest-com.ezproxy.liberty.edu/magazines/art-choosing-appropriate-repertoire/docview/2092474118/se-2

Papageorgi, Ioulia, and Natassa Economidou Stavrou. "Student Perceptions of the Classroom Environment, Student Characteristics, and Motivation for Music Lessons at Secondary School." *Musicae Scientiae: The Journal of the European Society for the Cognitive Sciences of Music.* (2021): 1-18.

Patrick, Helen, Avi Kaplan, and Allison M. Ryan. "Positive Classroom Motivational Environments: Convergence between Mastery Goal Structure and Classroom Social Climate." *Journal of Educational Psychology* 103 (2011): 367–82. doi:10.1037/a0023311.

Pulay, Alana and Amy Williamson. "A Case Study Comparing the Influence of L.E.D. and Fluorescent Lighting on Early Childhood Student Engagement in a Classroom Setting." *Learning Environments Research* 22, no. 1 (2019): 13-24, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/case-study-comparing-influence-led-fluorescent/docview/1993519031/se-2.

Renn, Kristen A. and Karen D. Arnold. "Reconceptualizing Research on College Student Peer Culture." The Journal of Higher Education (Columbus) 74, no. 3 (2003): 261-291. https://doi-org.ezproxy.liberty.edu/10.1080/00221546.2003.11780847.

Rentfrow, Peter J. and Samuel D. Gosling. "The Do Re Mi's of Everyday Life: The Structure and Personality Correlates of Music Preferences." *Journal of Personality and Social Psychology* 84, no. 6 (2003): 1236-1256.

Rentfrow, PJ, Goldberg, LR, Levitin, DJ. "The Structure of Musical Preferences: A Five-Factor Model." *Journal of Personality and Social Psychology* 100, no. 6 (2013):1139–1157. doi: 10.1037/a0022406.

Roseth, N. E. "A Survey of Secondary Instrumental Teachers' Immediacy, Ensemble Setup, and Use of Classroom Space in Colorado and Indiana." *Journal of Research in Music Education*, 68, (2020): 305–327. https://doi.org/10.1177/0022429420944227.

Rotjan, M. "Deciding For or Deciding With: Student Involvement in Repertoire Selection." *Music Educators Journal* 107, (2021): 28–34. https://doi.org/10.1177/00274321211013879.

Seet, H.A.A., Tan, E. & Rajalingam, P. "Effect of Seating Arrangement on Class Engagement in Team-based Learning: A Quasi-Experimental Study." *Medical Science Education* 32, (2022): 229–237. https://doi.org/10.1007/s40670-021-01469-7

Shaw, J.T. Culturally Responsive Choral Music Education: What Teachers Can Learn from Nine Students' Experiences in Three Choirs. Routledge: V.R. Lind, & C. McKoy, 2019. https://doi-org.ezproxy.liberty.edu/10.4324/9780429503900

Sickel, Jason. "Relationships: Their Power & Importance." *The Choral Journal* 58, no. 10 (2018): 67-73, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com /scholarly-journals/relationships-their-power-amp-importance/docview/2028910932/se-2.

Silveira, J. M., & Silvey, B. A. Effects of Ensemble Size and Repertoire Difficulty on Ratings of Concert Band Performances. *Journal of Research in Music Education* 68, (2020): 138–155. https://doi.org/10.1177/0022429420908.

Silvey, B. A., Regier, B. J., & Wacker, A. T. "Effects of Wind Ensemble Seating Configurations on College Instrumentalists' Perceptions of Ensemble Sound." *International Journal of Music Education*, 36, (2018): 509–520. https://doi.org/10.1177/0255761418771103.

Sinor, Jean. "The Ideas of Kodály in America." *Music Educators Journal* 83, no. 5 (1997): 37-43. doi:10.2307/3399007.

Smalley, R.T., Hopkins, S. "Social Climate and Help-Seeking Avoidance in Secondary Mathematics Classes." *Australian Education Researcher* 47, (2020): 445–476. https://doi. rg/10.1007/s13384-020-00383-y.

Sweet, Bridget. "A Case Study: Middle School Boys' Perceptions of Singing and Participation in Choir." *The Applications of Research in Music Education* 28, no. 2 (05, 2010): 5-12, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/case-study-middle-school-boys-perceptions-singing/docview/734029205/se-2.

Sweet, B. "The Adolescent Female Changing Voice: A Phenomenological Investigation." *Journal of Research in Music Education 63,* no. 1, (2015): 70–88. https://doi.org/10.1177/0022429415570755.

Tobia, V., Sacchi, S., Cerina, V. et al. "The Influence of Classroom Seating Arrangement on Children's Cognitive Processes in Primary School: The Role of Individual Variables." *Current Psychology* 41, 6522–6533 (2022). https://doi.org/10.1007/s12144-020-01154-9.

Tudge, Jonathan R. H. et al. "The Promise and The Practice of Early Childhood Educate in the Writings of Urie Bronfenbrenner." *Early Child Development and Care,* no. 191, (2021): 1079-1088. doi:10.1080/ 3004430.2020.1844193.

Turman, Katrina. "Children's Choirs*." The Choral Journal* 61, no. 11 (2021): 57-67, https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/childrens-choirs/docview/2622616714/se-2.

Walberg, Herbert J., and Gary J. Anderson. "Classroom Climate and Individual Learning." *Journal of Educational Psychology* 59, no. 6, (1968): 414–19. doi:10.1037/h0026490.

Wentzel, Kathryn R. "Student Motivation in Middle School: The Role of Perceived Pedagogical Caring." *Journal of Educational Psychology* 89, no. 3 (1997): 411–419. https://doi.org/10.1007/s12144-020-01154-9.

Williamson, S. (2000). Positively Adolescent!: Focusing typical adolescent qualities, such as abundant energy, love of fun, and desire for peer acceptance, can contribute to success in the music classroom. Music Educators Journal, 86(4), 29–32. https://doi.org/10.2307/3399602

Wright, Ali. "Creating a Positive Classroom Culture: Minute by Minute." *Educational Horizons* 92, no. 4 (2014): 12–15. http://www.jstor.org/stable/42927313.

Wolf, Stephen J, and Barry J Fraser. "Learning Environment, Attitudes and Achievement Among Middle-School Science Students Using Inquiry-Based Laboratory Activities." *Research in Science Education* 38, no. 3 (2008): 321–341.

Yi, Tammy S. "Alternative Seating Practices: Pedagogy of the Back of the Orchestra." *Music Education Research*, (2023): 1-15. https://doi.org/10.1080/14613808.2023.2187042.

Zoromski, Allison et al. "Middle School Teacher Perceptions and Use of Classroom Management Strategies and Associations with Student Behavior." *Journal of Emotional and Behavioral Disorders* 29, no. 4 (2020):199-212. https://doi-org.ezproxy.liberty.edu/10.1177/1063426620957.

Appendix A: Short Test of Musical Preferences- Revised (STOMP-R)

STOMP-Revised

Please indicate your basic preference for each of the following genres using the scale provided.

1-----------------2-----------------3-----------------4-----------------5-----------------6-----------------7

| Dislike Strongly | Dislike Moderately | Dislike a Little | Neither like nor dislike | Like a Little | Like Moderately | Like Strongly |

1. _____ Alternative
2. _____ Bluegrass
3. _____ Blues
4. _____ Classical
5. _____ Country
6. _____ Dance/Electronica
7. _____ Folk
8. _____ Funk
9. _____ Gospel
10. _____ Heavy Metal
11. _____ World
12. _____ Jazz

13. _____ New Age
14. _____ Oldies
15. _____ Opera
16. _____ Pop
17. _____ Punk
18. _____ Rap/hip-hop
19. _____ Reggae
20. _____ Religious
21. _____ Rock
22. _____ Soul/R&B
23. _____ Soundtracks/theme song

Appendix B: Factor loading for the actual and preferred versions of the CCQ-P

Table 3.3 Factor loading for the actual and preferred versions of the CCQ-P

Item no.	Factor loading																	
	Student Cohesiveness		Teacher Support		Equity		Task Clarity		Responsibility for Learning		Involvement		Task Orientation		Personal Relevance		Collaboration	
	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref
1	0.76	0.79																
2	0.72	0.76																
3	0.46	0.47																
4	0.52	0.69																
5	0.71	0.62																
6			0.45	0.61														
7			0.67	0.51														
8			0.62	0.49														
9			0.64	0.44														
10			0.56	0.77														
11					0.56	0.59												
12					0.47	0.58												
13					0.75	0.76												
14					0.68	0.7												
15					0.76	0.71												
16							0.64	0.66										
17							0.67	0.71										
18							0.61	0.67										

Item no.	Factor loading																	
	Student Cohesiveness		Teacher Support		Equity		Task Clarity		Responsibility for Learning		Involvement		Task Orientation		Personal Relevance		Collaboration	
	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref
19							0.54	0.55										
20							0.64	0.71										
21									0.7	0.79								
22									0.42	-								
23									0.52	0.54								
24									0.68	0.77								
25									0.63	0.75								
26											0.64	0.8						
27											0.7	0.74						
28											0.5	0.55						
29											0.64	0.63						
30											0.6	0.65						
31													0.64	0.77				
32													0.6	0.59				
33													0.62	0.6				
34													0.59	0.62				
35													-	0.5				
36															0.85	0.82		
37															0.66	0.71		
38															0.66	0.69		
39															0.76	0.82		
40															0.83	0.8		

Item no.	Factor loading																	
	Student Cohesiveness		Teacher Support		Equity		Task Clarity		Responsibility for Learning		Involvement		Task Orientation		Personal Relevance		Collaboration	
	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref	Act	Pref
41																	0.65	0.65
42																	0.59	0.55
43																	0.75	0.82
44																	0.67	0.64
45																	0.4	0.63
Eigenvalues	2.29	1.41	1.47	1.44	1.05	1.01	2.94	17.4	1.74	1.98	15.22	2.92	1.17	1.1	1.97	2.56	1.79	1.76
% Variance	5.09	3.13	3.26	3.2	2.33	2.1	6.53	38.67	3.87	4.4	33.82	6.49	2.61	2.44	4.39	5.68	3.98	3.92

Source: Data adapted from Aldridge, Jill M., and Siobhan Galos, "Development and Validation of an Instrument to Assess Primary School Students' Perceptions of the Learning Environment," *Learning Environment Research* 21 (2018): table 1, https://doi.org/10.1007/s10984-017-9248-7.

Note. "Factor loadings smaller than 0.40 have been omitted *N = 609* students in 31 classes"[389]

---

[389] Aldridge and Galos, "Development and Validation," 360.

Appendix C: NDA for CCQ-S

Non-Disclosure Agreement

This Agreement is made on the date that the last Party to execute it so executed it

BETWEEN

PARTNERS IN PROFESSIONAL LEARNING AND DEVELOPMENT, trading as **NATIONAL SCHOOL IMPROVEMENT PARTNERSHIPS** (ABN 30 620 191 353) a company limited by shares and registered under the Corporations Act of 138 Peppermint Grove Terrace, Peppermint Grove Beach, Western Australia 6271 ('**NSI**')

and

Bethany Marie Davis of ███████████████████████ (the "client")

Background:

1. The Client seeks to engage the use of the Classroom Climate Questionnaire ('CCQ') on a complimentary basis as part of a practitioner-based research project for Liberty University
2. The client will receive from NSI, or develop on behalf of NSI, Confidential Information as a result of conducting the CCQ (the 'Permitted Purpose').

In consideration and as a condition of NSI granting access to the CCQ and NSI providing the Confidential Information to the Client in addition to other valuable consideration, the receipt and sufficiency of which consideration is hereby acknowledged, the parties to this Agreement agree as follows:

Confidential Information

1. All written and oral information and materials disclosed or provided by NSI to the Client under this Agreement is Confidential Information regardless of whether it was provided before or after the date of this Agreement or how it was provided t the Client.
2. The Client acknowledges that in any position NSI may hold, in and as a result of the Client's employment by NSI, the Client will, or may, be making use of, acquiring or adding to information about certain matters and things which are confidential to NSI and which information is the exclusive property of NSI.
3. 'Confidential Information' means all data and information relating to the business, familial relationships and management of NSI, including but not limited to:

a. 'Familial Relationships' which includes any relationship between the Client and other members of staff and relationships between any and all Clients of NSI.

b. 'Customer Information' which includes names of customers of NSI, their representatives, all customer contact information, contracts and their contents and parties, customer services, data provided by customers and the type, quantity and specifications of products and services purchased, leased licensed or received by customers of NSI;

c. 'Intellectual Property' which includes information relating the NSI's proprietary rights prior to any public disclosure of such information, including but not limited to the nature of the proprietary rights, production data, technical and engineering data, technical concepts, test data and test results, simulation results, the status and details of research and development of products and services, and information regarding acquiring, protecting, enforcing and licensing proprietary rights (including patents, copyrights and trade secrets);

d. 'Marketing and Development Information' which includes marketing and development plans of NSI, price and cost data, price and fee amounts, pricing and billing policies, quoting procedures, marketing techniques and methods of obtaining business, forecasts and forecast assumptions and volumes, and future plans and potential strategies of NSI which have been or are being discussed;

e. 'Business Operations' which includes internal personnel and financial information of NSI, vendor names and other vendor information, purchasing and internal cost information, internal services and operational manuals and the manner and methods of conducting NSI's business;

f. 'Production Processes' which includes processes used in the creation, production and manufacturing of the work product of NSI, including but not limited to, formals, patterns, moulds, models, methods, techniques, specifications, processes, procedures, equipment, devices, programs and designs;

g. 'Service Information' which includes all data and information relating to the services provided by NSI, including but not limited to, plans, schedules, manpower, inspections and training information;

h. 'Proprietary Computer Code' which includes all sets of statements, instructions or programs of NSI, whether in human readable form or machine readable form, that are expressed, fixed, embodied or stored in any manner and that can be used directly or indirectly in a computer ('Computer Programs'); any report format, design or drawing created or produced by such Computer Programs; and all documentation, design specifications and charts, and operating procedures which support the Computer Programs;

i. 'Computer Technology' which includes all scientific and technical information or material of NSI, pertaining to any machine appliance or process including but not limited to, specifications, proposals, models, designs, formulas, test results and reports, analyses, simulation results, tables of operating conditions, materials, components, industrial skills, operating and testing procedures, shop practices, know-how and show-how;

c. To the extent required by law.

Avoiding Conflict of Opportunities

9. It is understood and agreed that any business opportunity relating to or similar to the NSI's current or anticipated business opportunities coming to the attention of the Client during the Client's employment is an opportunity belonging to NSI. Accordingly, the Client will advise NSI of the opportunity and cannot pursue the opportunity, directly or indirectly, without the written consent of NSI.

10. Without the written consent of NSI, the Client further agrees not to:
    a. Solely or jointly with other undertake or join any planning for or organisation of any business activity competitive with the current or anticipated business activities of NSI; and
    b. Directly or indirectly engage or participate in any other business activities which NSI, in its reasonable discretion, determines to be in conflict with the best interests of NSI.

Non-Solicitation

11. The Client will not, during the term of this Agreement and for a period of two (2) years after the termination of this Agreement, directly or indirectly, employ or solicit for employment any person who is now employed or retained by NSI, any affiliate of NSI without the prior written consent of NSI, which consent may not be unreasonably withheld.

Non-Competition

12. Other than through employment with a bona-fide independent party, or with the express written consent of NSI, which will not be unreasonable withheld, the Client will not, during the continuance of this Agreement or within one (1) year after the termination or expiration, as the case may be, of this Agreement, be directly or indirectly involved with a business which is in direct competition with the particular business line of NSI that the Client was working during any time in the last year of employment with NSI.

13. For a period of one (1) year from the date of termination or expiration, as the case may be, of the Employment, the Client will not divert or attempt to divert from NSI any business NSI had enjoyed, solicited, or attempted to solicit, from its customers, prior to termination or expiration, as the case may be, of the Employment.

Ownership and Title

14. The Client acknowledges and agrees that rights, title and interest in any Confidential Information will remain the exclusive property of NSI. Accordingly, the Client specifically agrees and acknowledges that the Client will have no interest in the Confidential Information, including, without limitation, no interest in know-how, copyright, trademarks or trade names, notwithstanding the fact that the Client may have created or contributed to the creation of the same.

15. The Client does herby waive any moral rights that Client may have with respect to the Confidential Information.

16. The Confidential Information will not include anything developed or produced by the Client during the term of the Agreement, including but not limited to

j. 'Accounting Information' which includes, without limitation, all financial statements, annual reports, balance sheets, company assets information, company liability information, revenue and expense reporting, profit and loss reporting, cash flow reporting, accounts receivable, accounts payable, inventory reporting, purchasing information and payroll information of NSI; and

k. Confidential Information will also include any information that has been disclosed by a third party to NSI and is protected by a non-disclosure agreement entered into between the third party and NSI.

4. Confidential Information will not include the following information:
   a. Information that is generally known in the industry of NSI;
   b. Information that is now or subsequently becomes generally available to the public through no wrongful act of the Client;
   c. Information that the Client rightfully had in their possession prior to the disclosure to the Client by the NSI, the burden being on the Client to establish this through documentation;
   d. Information that is independently created by the Client without direct or indirect use of the Confidential Information, the burden being on the Client to establish this through documentation; or
   e. Information that the Client rightfully obtains from a third party who has the right to transfer or disclose it, the burden being on the Client to establish this through documentation.

Obligations of Non-Disclosure

5. Except as otherwise provided in this Agreement, the Client must not disclose the Confidential Information.

6. Except as otherwise provided in this Agreement, the Confidential Information will remain the exclusive property of NSI and will only be used the Client for the Permitted Purpose. The Client will not use the Confidential Information for any purpose that might be directly or indirectly detrimental to NSI or any of its affiliates or subsidiaries.

7. The obligations to ensure and prevent the disclosure of the Confidential Information imposed on the Client in this Agreement and any obligations to provide notice under this Agreement will survive the expiration or termination, as the case may be, of the Agreement and those obligations will last indefinitely.

8. The Client may disclose any of the Confidential Information:
   a. To such of their agents, representatives and advisors that have a need to know for the Permitted Purpose provided that:
      i. The Client has informed such personnel of the confidential nature of the Confidential Information;
      ii. Such personnel agree to be legally bound to the same burdens of non-disclosure and non-use as the Client;
      iii. The Client agrees to take all necessary steps to ensure that the terms of this Agreement are not violated by such personnel; and
      iv. The Client agrees to be responsible for and indemnify NSI for any breach of this Agreement by their personnel.
   b. To a third party where NSI has consented in writing to such disclosure; and

21. If the Client loses or makes unauthorised disclosure of any of the Confidential Information, the Client will immediately notify NSI and take all reasonable steps necessary to retrieve the lost or improperly disclosed Confidential Information.
22. Any notices or delivery required in this Agreement will be deemed complete wen
    a. Hand delivered;
    b. Delivered by agent; or
    c. Seven (7) days after being placed in the post, postage prepaid, to the parties at the addresses contained in this Agreement or as the parties may later designate in writing.

Representations

23. In providing the Confidential Information, NSI makes no representations, either express or implied as to its adequacy, sufficiency, completeness, correctness or its lack of defect of any kind, including any patent or trademark infringement that may result from the use of such information. NSI will not be liable for any damage or loss that may occur from such provision or use of the Confidential Information.

Termination

24. This Agreement will automatically terminate on the date that the Client's Employment with NSI terminates or expires as the case may be. Except as otherwise provided in this Agreement, all right and obligations under this Agreement will terminate at that time.

Assignment

25. Except where a party has changed its corporate name or merged with another corporation, this Agreement may not be assigned or otherwise transferred by either party in whole or part without the prior written consent of the other party to this Agreement.

Amendments

26. This Agreement may only be amended or modified by a written instrument executed by both NSI and the Client.

Governing Law

27. This Agreement will be construed in accordance and governed by the laws of Western Australia

General Provisions

28. Time is of the essence in this Agreement.
29. This Agreement may be executed in counterparts.
30. Headings are inserted for the convenience of the parties only and are not to be considered when interpreting this Agreement. Words in the singular mean and include the plural and vice versa. Words in the masculine mean and include the feminine and vice versa.
31. The clauses, paragraphs, and subparagraphs contained in this Agreement are intended to be read and construed independently of each other. If any part of this

intellectual property, process, design, development, creation, research, invention, know-how, trade name, trademarks or copyright that:

  a. was developed without the use of any equipment, supplies, facility or Confidential Information of NSI;
  b. was developed entirely on the Client's own time;
  c. does not relate to the actual business or reasonably anticipated business of NSI;
  d. does not relate to the actual or demonstrably anticipated processes, research or development of NSI; and
  e. does not result from any work performed by the Client for NSI.

17. The Client agrees to immediately disclose to NSI all Confidential Information developed in whole or in part by the Client during the term of the Employment and to assign to NSI any right title or interest the Client may have in the Confidential Information. The Client agrees to execute any instruments and to do all other things reasonably requested by NSI (both during and after the term of the Employment) in order to vest more fully in NSI all ownership rights in those items transferred by the Client to NSI.

Remedies

18. The Client agrees and acknowledges that the Confidential Information is of a proprietary and confidential nature and that any disclosure of the Confidential Information to a third party in breach of this Agreement cannot be reasonably or adequately compensated for in money damages and would cause irreparable injury to NSI. Accordingly, the Client agrees that NSI is entitled to, in addition to all other rights and remedies available to it at law or in equity, an injunction restraining the Client and any agents of the Client, from directly or indirectly committing or engaging in any act restricted by Agreement in relation to the Confidential Information.

Return of Confidential Information

19. The Client agrees that, upon request of NSI, or in the event that the Client ceases to require use of the Confidential Information, or upon termination of this Agreement, or the expiration or termination of the Employment, the Client will turn over to NSI all documents, disks or other computer media, or other material in the possession or control of the Client that:

  a. May contain or be derived from ideas, concepts, creations, or trade secrets and other proprietary and Confidential Information as defined in this Agreement; or
  b. Is connected with or derived from the Client's services to NSI.

Notices

20. In the event that the Client is required in a civil, criminal or regulatory proceeding to disclose any part of the Confidential Information, the Client will give to NSI prompt written notice of such request so NSI may seek an appropriate remedy or alternatively to waive the Client's compliance with the provisions of this Agreement in regard to the request.

Agreement is held to be invalid, this invalidity will not affect the operation of any other part of this Agreement.

32. The Client is liable for all costs, expenses and expenditures including, and without limitation, the complete legal costs incurred by NSI in enforcing this Agreement as a result of any default of this Agreement by the Client.

33. NSI and the Client acknowledge that this Agreement is reasonable, valid and enforceable. However, if a court of competent jurisdiction finds any of the provisions of this Agreement to be too broad to be enforceable, it is the intention of NSI and the Client that such provision be reduced in scope by the court only to the extent deemed necessary by that court to render the provision reasonable and enforceable, bearing in mind that it is the intention of the Client to give NSI the broadest possible protection against disclosure of the Confidential Information.

34. No failure or delay by NSI in exercising any power, right or privilege provided in this Agreement will operate as a waiver, nor will any single or partial exercise of such rights, powers or privileges preclude any further exercise of them or the exercise of any other right, power or privilege provided in this Agreement.

35. This Agreement will inure to the benefit of and be bending upon the respective heirs, executors, administrators, successors and assigns, as the case may be of NSI and the Client.

36. This Agreement constitutes the entire agreement between the parties and there are no further items or provisions, either oral or otherwise.

EXECUTED AS AN AGREEMENT BY THE PARTIES

For and on behalf of
PARTNERS IN PROFESSIONAL LEARNING AND DEVELOPMENT (Trading as NATIONAL SCHOOL IMPROVEMENT PARTNERSHIPS (ABN 30 620 191 353)

███████████

Authorised signatory

Meghan J Blackstock

Name of authorised signatory

25.01.2023

Date

For and on behalf of the **CLIENT**

██████████ :53 EST)

Authorised signatory

# Bethany Davis

Name

Jan 25, 2023

Date

CONTACTS

PARTNERS IN PROFESSIONAL LEARNING AND DEVELOPMENT (trading as NATIONAL SCHOOL IMPROVEMENT PARTNERSHIPS)

Notices
Name: Meghan Blackstock, Executive Manager
Address: National School Improvement Partnerships
            P.O. Box 42
            Stoneville 6081
Telephone: +61 419 961 652
E-mail: meghan.blackstock@nsipartnerships.com.au

CLIENT

Notices

Name: Bethany Marie Davis
Address:
Telephone:
E-mail: bmdavis13@liberty.edu

Appendix D: Permission to Conduct Research Letter
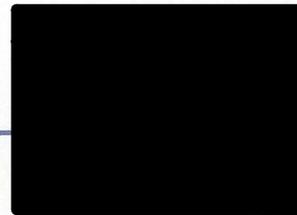
Research Proposal Approval/Denial Form

March 15, 2023

Dear Ms. Davis:

Representatives of the ███████ School System have reviewed your research proposal entitled "**The Effects of Repertoire Selection and Classroom Configuration on Middle School Choral Classroom Environment**". The representatives have agreed on the decision as indicated below. Please contact ████████ ████████████████ Central Office if you have any questions about this decision.

_____   Proposal Pending

___X___   Proposal Approved

_____   Proposal Approved with Stipulations

_____   Proposal Denied

Accredited by Cognia
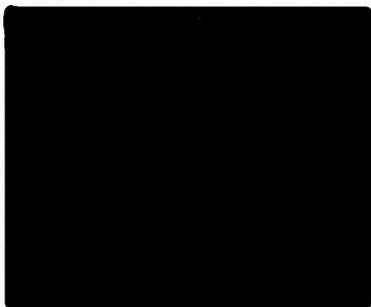
Appendix E: Permission to Conduct Research Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

March 30, 2023

Bethany Davis
Nathan Street

Re: IRB Approval - IRB-FY22-23-859 The Effects of Repertoire Selection and Classroom Configuration on Middle School Choral Classroom Environment

Dear Bethany Davis, Nathan Street,

We are pleased to inform you that your study has been approved by the Liberty University Institutional Review Board (IRB). This approval is extended to you for one year from the following date: March 30, 2023. If you need to make changes to the methodology as it pertains to human subjects, you must submit a modification to the IRB. Modifications can be completed through your Cayuse IRB account.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix F: Child Assents to Participate in a Research Study Form

Child Assent to Participate in a Research Study

What is the name of the study and who is doing the study?
The name of the study is "The Effects of Repertoire Selection and Classroom Configuration on Middle School Choral Classroom Environment," and the person doing the study is Bethany Davis.

Why is Bethany Davis doing this study?
Bethany Davis wants to know how students think about the choir classroom based on classroom configuration, repertoire selection, and classroom environment in the middle school choir classroom.

Why am I being asked to be in this study?
You are being asked to be in this study because you are a sixth, seventh, or eighth grade student enrolled in a middle school choir class.

If I decide to be in the study, what will happen and how long will it take?
If you decide to be in this study, you will complete a survey on your Chromebook during chorus class. The survey will consist of demographic questions, The Short Test of Musical Preferences-Revised survey, and The Classroom Climate Questionnaire. You will also choose one of three diagrams that best represent your chorus classroom layout. It will take approximately 40-45 minutes to complete the survey.

Do I have to be in this study?
No, you do not have to be in this study. If you want to be in this study, then tell the researcher. If you don't want to, it's OK to say no. The researcher will not be angry. You can say yes now and change your mind later. It's up to you.

What if I have a question?
You can ask questions any time. You can ask now. You can ask later. You can talk to the researcher. If you do not understand something, please ask the researcher to explain it to you again.

<div align="center">

Bethany Davis
706-768-8133/bethanydavis279@gmail.com

Dr. Nathan Street
nstreet14@liberty.edu

Liberty University Institutional Review Board
1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515
irb@liberty.edu

</div>

Appendix G: Parental Opt-Out Form

Parental Opt-Out

Title of the Project: The Effects of Repertoire Selection and Classroom Configuration on Middle School Choral Classroom Environment
Principal Investigator: Bethany Davis, Doctoral Candidate, School of Music, Liberty University

Invitation to be Part of a Research Study

Your student is invited to participate in a research study. To participate, he or she must be in the 6th, 7th, or 8th-grade and enrolled in a middle school choir class. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to allow your student to take part in this research project.

What is the study about and why are we doing it?

The purpose of the study is to predict the effects of classroom configuration and repertoire selection on student perspectives of the middle school choral classroom environment.

What will participants be asked to do in this study?

If you agree to allow your student to be in this study, I will ask her or him to do the following:
1. Complete a survey on their Chromebook during chorus class. The survey will consist of demographic questions, The Short Test of Musical Preferences-Revised (STOMP-R), and The Classroom Climate Questionnaire (CCQ). They will also choose one of three possible classroom configurations. It will take approximately forty to forty-five minutes to complete the survey.

How could participants or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a better understanding for choir teachers of the effects of classroom configuration and repertoire selection on the middle school student's perspective on the choir classroom. Music educators aim to provide students with a high-quality choral classroom experience, and this study could benefit teachers as they create a positive classroom environment.

What risks might participants experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks your student would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher and faculty sponsor will have access to the records.
- Participant responses to the online surveys will be anonymous.

Appendix H: Recruitment Email

Dear Parent/Guardian:

As a doctoral candidate in the School of Music at Liberty University, I am conducting research as part of the requirements for a Doctor of Music Education degree. The purpose of my research is to determine the potential predictive relationship between repertoire selection and classroom configuration on student perspectives of the middle school choral classroom atmosphere, and I am writing to invite eligible participants to join my study.

Participants must be sixth, seventh, or eighth-grade students currently enrolled in a middle school choir class. Participants, if willing, will be asked to complete a survey on their Chromebook during chorus class. The survey will consist of demographic questions, The Short Test of Musical Preferences, and The Classroom Climate Questionnaire. It should take approximately 40-45 minutes to complete the surveys. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please review the attached parental opt-out form. If you would prefer that your child not participate, please sign the form and return it to your child's teacher.

A parental opt-out form and a child assent form are attached to this email and will also be sent home with your student. The assent form will be presented to your child prior to taking the survey. This consent document contains additional information about my research. If you would prefer that your child not participate in this study, please sign the parental opt-out form and return it to your child's teacher by one week from today.

Sincerely,

Bethany Davis
Doctoral Candidate at Liberty University
bmdavis13@liberty.edu