The Sound of Silence:

Examining Teacher Perspectives on Silence During Staff Meetings Using

Q-Methodology

by

Anne K. Zito

Submitted in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education

in the

Educational Leadership

Program

YOUNGSTOWN STATE UNIVERSITY

May 2022

The Sound of Silence:

Examining Teacher Perspectives of Silence During Staff Meetings Using Q-Methodology

Anne K. Zito

I hereby release this dissertation to the public. I understand that this dissertation will be made available from the OhioLINK ETD Center and the Maag Library Circulation Desk for public access. I also authorize the University or other individuals to make copies of this dissertation as needed for scholarly research.

Anne K. Zito, Student	Date
vals:	
Dr. Karen H. Larwin, Dissertation Chair	Date
Dr. Sherri Harper Woods, Committee Member	Date
Dr. Patrick O'Leary, Committee Member	Date
Dr. Patrick Spearman, Committee Member	Date

©

Anne K. Zito

2022

Abstract

Staff meetings are a regular occurrence in schools, yet both teachers and principals typically report dissatisfaction with these meetings. Teacher dissatisfaction with staff meetings can be influenced by how content they are with their own level of silence. Previous research tended to focus on the negative aspects of silence during meetings. However, silence behaviors should be viewed on a continuum from negative to positive, depending on the context. Silence is detrimental to group functioning when it is a result of oppression, fear of negative consequences, or a lack of engagement. Silence is a positive behavior when it leads to reflective thinking, respectful communication, and active listening behaviors. This study used Q-methodology, which is a mixed-methods research design that combines quantitative and qualitative methods to examine individuals' subjective experiences around one topic. Teachers fell into three distinct groups related to their perspectives on silence during staff meetings: Get the Party Started, I Don't Care Anymore, and Don't Stop Believin'. The meeting format and how the principal facilitates the meeting seems to have a more pronounced influence on teacher silence behaviors, teacher attitudes towards staff meetings, and their own silence levels; the leadership style was less impactful. Teachers report increased satisfaction when the principal intentionally designs and facilitates relevant and impactful staff meetings where group norms are followed. The proposed *iceberg model of teacher* silence can be used to assist principals with assessing teacher silence in their own school buildings.

Keywords: teacher silence, staff meeting, leadership, collective teacher efficacy, meeting engagement, iceberg model of teacher silence, prosocial silence

And in the naked light I saw

Ten thousand people, maybe more

People talking without speaking

People hearing without listening

People writing songs that voices never share

No one dared

Disturb the sound of silence

-Simon and Garfunkel, "The Sound of Silence" (1964)

Dedication

This dissertation is dedicated to my amazing husband Mark and my three incredible children: Hannah, Samuel, and Nathan. Your unwavering support and encouragement gave me the determination and persistence to achieve this goal. Even when I was exhausted and we were in the midst of a global pandemic, you never let me quit! Thank you for understanding all of the time that I needed to spend on my dissertation. I share this achievement with you! I love you with my whole heart!

This dissertation is also dedicated in the loving memory of my Mormor, Ruth Westerlund Peterson. A woman ahead of her time, and a model of a woman of intelligence and strength.

Thank you to Dr. Karen Larwin. You taught me how to become a researcher—supporting me while challenging me. Thank you for the endless hours you spent with me during this dissertation process, and for holding me to a high standard so that I could engage in impactful research. I am forever grateful.

Thank you to my family, friends, and colleagues who encouraged me along the way and were always there to listen and to ask for an update, especially: my mom and step-father (Karin & Rob Swedenborg), my dad and his partner (Bill Nehls and Dana Clark), my sister (Dr. Elise Durkee), my Youngstown State University doctoral cohort (Kristen Crish, Holly Welsh, Kim Sharshan, Janice Ulicny, Gina Brown), Shannon Bowman, Anne Maholm, Liz Senften, Christina Berwa, Julie Stitzel, Traci Bowman, my speech-language pathology colleagues, and the entire staff at McEbright CLC in Akron Public Schools.

Thank you to my dissertation committee, Dr. Sherri Harper Woods, Dr. Patrick O'Leary, and Dr. Patrick Spearman; and to my editor, Cait Reash. I appreciate your feedback and support throughout this process. Your additional insights brought clarity to my study and provided ideas for future research.

Thank you also to Deborah Musiek, my principal at McEbright Elementary School. You gave me an empowering example of how staff meetings can be utilized to build collective teacher efficacy. Your example provided the inspiration for this study—I want all schools to have staff meetings that are engaging, intentionally designed, and build collective teacher efficacy and equity. I hope that this study provides additional discussion around harnessing the power of staff meetings in schools to build collective teacher efficacy.

Table of Contents

Chapter 1: Introduction	1
Statement of the Problem	2
Purpose of the Study	4
Primary Research Questions	5
Research Design	5
Conceptual Framework	7
Assumptions, Limitations, and Scope	8
Definition of Terms	9
Summary	11
Chapter 2: Literature Review	12
Systems Theory	12
Theory of the Oppressed	13
Interrelated Theories	14
Teacher Voice and Silence	15
Teacher Voice Behaviors	15
Teacher Silence Behaviors	18
Employee Silence and Silence Antecedents Theory	22
Leadership	24
Leadership Styles	24
Leader Responsibility for Supporting Discourse	26
Supportive Climate	28
Equity and Inclusivity	32
Collective Teacher Efficacy	33
Meetings	36
Best Practices for Meetings that Encourage Discourse	37
Why Meetings are Sometimes Not Productive	41
Deficiencies in the Evidence	43
Summary	44
Chapter 3: Methodology	47

Participants	48
Instrumentation: Developing the Concourse	49
Pilot Study	50
Procedure	60
Data Analysis	63
Summary	64
Chapter 4: Results	67
Participants	67
Q-Sort Results	69
Correlation Matrix	69
Q-sort Statements with Corresponding Ranks	73
Factor Arrays	76
Analysis of Factors: Understanding the Meaning of Viewpoints	82
Factor 1: Get the Party Started	83
Factor 2: I Don't Care Anymore	89
Factor 3: Don't Stop Believin'	94
Combined Viewpoints	99
Consensus Between Factor 1, Factor 2, and Factor 3	99
The Unfactored Outliers	100
Summary	103
Chapter 5: Discussion	106
Summary of Findings	106
Research Question 1	107
Research Question 2	110
Research Question 3	112
Interpretation of Findings	113
Context of Findings	114
Implications of Findings	117
Limitations of Study	124
Future Directions	125
Conclusion	129

References	
Appendix A	145
Appendix B	147
Appendix C	150
Appendix D	152
Appendix E	155
Appendix F	

Chapter 1

Introduction

The purpose of this study is to investigate the viewpoints that teachers have about their own silence during staff meetings. After twenty-six years of working as a speech-language pathologist in a large urban district in northeast Ohio, it has become apparent that staff meetings are not typically utilized to increase the capacity of teachers. Staff meetings usually consist of a few people who voice their opinions and ideas, while the remainder of the staff remain silent. The sound of silence can be deafening, but what does it really mean?

What does silence look like and sound like during staff meetings? Is the silence a positive behavior, a negative behavior, or a combination of the two? Is it dependent upon the context, the relationships, and the predispositions of the individual teachers? The purpose of this study is to shed more light on this under researched topic. The hope is that the knowledge gained from this research will help principals learn how to plan and facilitate staff meetings so that teacher silence can be leveraged to develop collective teacher efficacy and inclusiveness.

In a large quantitative study of 30,489 educators, 36% of teachers reported that they did not feel comfortable asking questions during staff meetings, and 47% of teachers felt like they did not have a voice in school decisions (Quaglia et al., 2020). Teachers who feel they have no voice may act out in ways that undermine organizational decisions (Alqarni, 2020; Brinsfield, 2013; Lam et al., 2018; Netchanska et al., 2020). Teachers may decide to comply instead of committing to organizational decisions and procedures, which could have negative consequences for organizational effectiveness, school climate,

and student achievement (Donohoo, 2017; Doohoo & Katz, 2020; Kahn,1990; Lefstein et al., 2020b).

Wasted time and energy are costs associated with unproductive meetings (Rogelberg et al., 2012). School districts invest much time and money into staff meetings. Each staff meeting costs a district the equivalent of one hour of salary for each teacher and administrator who attends (Rogelberg, 2019a). Over the course of a school year, that time and money is significant. When meetings are unproductive, individuals may leave the meeting feeling anxious, stressed, exhausted, or annoyed (Brinsfield, 2013; Rogelberg et al., 2012; Scott et al., 2015). These feelings contribute to *meeting recovery syndrome*, which is the additional time that individuals need after a meeting concludes to get back to a calm or positive state (Rogelberg et al., 2012).

The principal's ability to effectively manage organizational time and resources predicts positive school outcomes, including student achievement and teacher satisfaction (Grissom & Loeb, 2011; Horng et al., 2010). As principals are charged with considering equity issues in their schools, they must reflect on how their practices and behaviors can remove barriers and create opportunities for all members of their school community to participate verbally (Grissom et al., 2021). "Equity-focused principals lead differently, and evidence suggests that leadership for equity can make schools more inclusive" (Grissom et al., 2021, p. 92). The starting point for equity, inclusivity, and diversity of discourse may be through understanding the phenomenon of teacher silence in meetings.

Statement of the Problem

"Silence on a team can be a sign that someone is drowning. Or it can be a canary in the coal mine" (Ludema & Johnson, 2019, p. 1). During a team meeting, silence can

indicate that an individual is struggling, or silence can be an indication of systemic issues that must be addressed immediately for the health of the overall school community (Kahn, 1990; Ludema & Johnson, 2019; Mayrogordato & White, 2020; Nechanska et al., 2020; Rogelberg, 2019a). Oppression and discrimination may present as silence during meetings (Aguilar, 2020: Freire, 2000; Sherf et al., 2021). Silence can keep schools from achieving their true potential, as diverse voices are not contributing to group discourse, decision-making, and problem-solving (Algarni, 2020; Donohoo, 2017; Donohoo & Katz, 2020; Dweck, 2000; Glickman et al., 2018; Sherf et al., 2021). Teachers may be afraid to share ideas and information during the meeting, have low engagement or motivation, or may stay silent for a multitude of other reasons that are not directly apparent to the principal (Bernstein & Ringel, 2018; Freire, 2000; Patterson et al., 2012; Peng & Wei, 2020; Rogelberg, 2019a). While these statements may appear to be alarmist, recent peer-reviewed research and nonacademic publications assert the dangers of employee silence related to the effective functioning of an organization or school (Berg & Homan, 2021; Chou & Chang, 2020; Ludema & Johnson, 2019; Quaglia et al., 2020; Sherf et al., 2021).

Conversely, other researchers support the value of silence as a necessary behavior for productive group functioning and team building (Cain, 2012; Chou & Chang, 2021; Faure et al., 2020; Lam et al., 2018; Patterson et al., 2012; Shanock et al., 2013).

Personality differences, time for reflection, relationship building, desire for meeting efficiency, and de-escalating tension have been identified as positive reasons for an individual's silence (Cain, 2012; Chou & Chang, 2021; Faure et al., 2020; Lam et al., 2018; Patterson et al., 2012; Shanock et al., 2013).

The motivations for an individual's silence during a staff meeting is not often easily interpreted by leaders (Brinsfield, 2013; Chou & Chang, 2020; Kwon & Farndale, 2020; Lefstein et al., 2020a; Rogelberg et al., 2012; Sherf et al., 2021). An administrator's ability to distinguish between positive and negative reasons for teacher silence during staff meetings is imperative for productive meetings to occur (Ludema & Johnson, 2019). A teacher who is silent during staff meetings may facilitate or undermine school goals. Without an understanding of the variety of reasons for teacher silence, administrators may not effectively engage teachers in professional discussions, build strong teacher teams, or increase student achievement (Donohoo & Katz, 2020; Ludema & Johnson, 2019; Robinson & Shuck, 2019).

Purpose of the Study

With research revealing competing views on employee silence, the purpose of this study is to gain information and insight into how and why teachers are silent during regular staff meetings. Comprehensive information on teacher silence will help school administrators effectively engage all teachers during staff meetings, not just the teachers who are vocal. The study will also investigate whether teachers are satisfied with their level of silence during staff meetings, and if they view silence as a positive, neutral, or negative behavior. A comprehensive understanding of why teachers choose to remain silent provides insight into how silence during meetings influences teachers' feelings about themselves, their colleagues, their principal, and the school overall. With this knowledge of why teachers choose to speak up or choose to remain silent, administrators will be better able to design and implement staff meetings that are engaging, relevant, equitable, inclusive, and build collective teacher efficacy (Donohoo & Katz, 2020).

Primary Research Questions

Research establishes teacher voice as a requirement for building collective teacher efficacy as it relates to student achievement (Bandura, 1998; Donohoo, 2017; Donohoo & Katz, 2020; Hattie, 2015). If teachers are silent, there could be negative implications for student learning; however, no research was found that investigated this topic. Most peer-reviewed studies focus on the importance of voice, not silence (Sherf et al., 2021) or on teachers' feelings about the overall experience of staff meetings, without mention of silence as a factor (Abu-Shreah & Al-Sharif, 2017; Mafa, 2016).

Primary research questions:

- 1. What are teachers' reasons for being silent during staff meetings?
 - a. Are they satisfied with their level of silence during staff meetings?
 - b. Do teachers come to the staff meeting planning on being silent?
- 2. What do teachers indicate reinforces silence behaviors during staff meetings?
 - a. Does the format of the staff meeting contribute to silence?
 - b. Does the behavior or leadership characteristics of the principal contribute to their silence?
- 3. Do teachers report any benefits or drawbacks of being silent during staff meetings?

Research Design

The target population is full-time public-school teachers from various school districts in northeast Ohio and western Pennsylvania. The study will be conducted in February, so participants will have had the opportunity to build relationships with colleagues and administrators. By this point in the school year, they will have also

experienced numerous staff meetings which allows them to form opinions and preferences about how staff meetings are conducted, as well as to gauge their own level of satisfaction with silence.

The design of the study is a mixed-methods approach using Q-methodology. Q-methodology is "a unique combination of qualitative and quantitative research techniques that permits the systematic study of subjectivity" related to the topic of interest (Valenta & Ulrike, 1997, p. 501). Q-methodology focuses on understanding people's perceptions and thoughts about specific phenomena, while looking for patterns in responses (Brown, 1995; Cross, 2005; Watts & Stenner, 2012).

Purposive sampling is a method that is utilized for selecting participants who are most likely to contribute useful information on the topic of study (Trochim et al., 2016). The participants will be purposefully selected and contacted by individuals from various school districts in northeast Ohio and western Pennsylvania. Demographic data collected will ensure that a variety of participants are selected. Q-methodology typically uses a small sample size since there is a limit to the distinct viewpoints on a particular topic (Watts & Stenner, 2012; Valenta & Ulrike, 1997). Sample sizes that are significantly larger than the Q-set will not likely yield additional viewpoints beyond those obtained with a sample size in line with the Q-set size (Watts & Stenner, 2012).

Teachers may feel uncomfortable reporting that their silence in meetings is due to the actions of their peers, themselves (e.g., personal reasons), or the building principal.

Q-methodology is utilized due to its ability to measure subjective attitudes of individuals in a way that curbs a social desirability pattern of responding (Cross, 2005; K. H. Larwin, personal communication, December 2, 2021). Social desirability responding is of concern

since teachers may feel hesitant to report negative reasons for their silence to building principals with whom they have an otherwise good relationship. However, sorting is a subconscious process where responders are not easily able to manipulate their responses to be perceived in a certain way (K. H. Larwin, personal communication, December 2, 2021). With surveys, participants will often rate neutrally, but the Q-sort does not allow for that type of response pattern (K. H. Larwin, personal communication, December 2, 2021). Q-methodology can uncover diverse perspectives on a phenomenon in a non-threatening way because the Q-set is already generated for the participants. Participants are required to only sort the statements rather than generate their own, novel statements (Zabala et al., 2018).

Conceptual Framework

Teacher silence is a phenomenon that is dependent upon the interaction of multiple factors, including: context, relationships, leadership behaviors, and personality characteristics. As a result, teacher silence will be examined within the framework of *systems thinking* (Senge, 2006). *Systems thinking* is a framework for investigating and identifying patterns and interrelationships between individuals and the context (Senge, 2006). Viewing teacher silence, staff meetings, leadership behaviors, and relationships as interrelated, rather than static and isolated, will allow for a more comprehensive understanding of teacher silence.

Freire's Theory of the Oppressed (2000) emphasizes the importance of authentic dialogue for building relationships and shared knowledge. Trusting relationships are built through these practices (Freire, 2000). Freire warned that oppression can result when individuals are silenced either by others or by their own choices. Individuals may decide

to self-silence as a result of self-depreciation, alienation, or insecurity (Freire, 2000). Leaders bear the responsibility of creating safe spaces and building trust so that all individuals feel empowered to share their ideas (Freire, 2000). When learning organizations value diverse voices and ideas, equity in participation and engagement result (Freire, 2000; Senge, 2006).

Assumptions, Limitations, and Scope

The goal of this study is to explore teachers' perspectives of silence during staff meetings. A survey design may result in bias due to social desirability effects (Cross, 2005); therefore, Q-methodology was determined to be a more effective method to understand this phenomenon (Watts & Stenner, 2012).

Q-methodology assumes that the participants are truthful in the way in which they sort the concourse statements. While social desirability responding is reduced through the use of Q-methodology, bias cannot be completely eliminated from a participant's response pattern. The concourse statements were selected based on an extensive review of the literature in the areas of employee silence, teacher silence, meeting science, employee voice, and teacher voice. Additionally, a pilot study and survey were administered to a purposive sample. First, the concourse statements were sorted or rated by the pilot participants. Open-ended responses were provided at the completion of the Q-sort so that all participants were given the opportunity to clarify responses or provide any perspectives that were not incorporated in the Q-sort. Modifications were made based on the findings of the sample sort. Then, a survey was distributed to a different group of individuals. Information gathered was then used to ascertain that the real-life experiences of current teachers were represented in the final concourse statements. The concourse

size was reduced to 30 statements for ease of sorting for the participants. This may have inadvertently left out some possible viewpoints about the research topic; however, that seems unlikely based on the information obtained from the extensive literature review, sample sort, participant interview, and survey.

The purpose of Q-methodology is to investigate and categorize the variety of perspectives on a topic rather than to generalize results to a larger population (Watts & Stenner, 2012). As a result, none of the results from this study can be generalized to a larger population. Findings from this study would have the potential to be used in principal education classes/training, especially related to building collective teacher efficacy, planning and conducting effective staff meetings, and supporting inclusive, professional discourse.

Definition of Terms

Collective teacher efficacy (CTE): the belief of a group of educators that through their combined efforts, they can positively influence the achievement and learning of *all* students in their school (Bandura, 1998; Donohoo, 2017; Donohoo & Katz, 2020).

Discourse: verbal interaction used for a variety of social purposes, including to build relationships, to protest, to negotiate, to build knowledge, to regulate interactions (Korobov, 2020; Lefstein et. al., 2020a). Discourse is concerned with the intent of the verbal interaction, within the context of that interaction (Korobov, 2020).

Engagement: a continuum of behavior that changes during an event and includes both active and passive behaviors (Berry, 2020); a multi-faceted construct that is composed of cognitive, emotional, and behavior characteristics (Kahn, 1990).

Employee silence: a person's intentional or unintentional withholding of verbal expression or the absence of sharing one's true thoughts and knowledge with others (Alqarni, 2020; Chou & Chang, 2020; Donaghey et al., 2011; Nechanska et al., 2020). Silence varies depending on the context of the interaction and is not an absolute behavior (Cain, 2012; Faure et al., 2020). Employee silence in organizations can be present behaviorally, emotionally, and physically (Kahn, 1990; Robinson & Shuck, 2019).

Participation: employees' contribution of a wide variety of perspectives and interests within organizational structures and processes through communicative interactions (Stohl, 2001). Participation increases when employees are empowered to communicate frequently and put forth more than minimal efforts towards reaching organizational and personal goals (Stohl, 2001).

Staff meeting: "a sanctioned gathering of the school head, teachers, and the other administrative staff [to deliberate] the affairs of the school" (Mafa, 2016, p. 61) with a clear purpose, agenda, and group norms for behavior (Scott et al., 2015; Rogelberg, 2019a).

Teacher voice: "teachers' ability to speak openly about opinions, ideas, and suggestions in an environment that is driven by trust, collaboration, and responsibility. Teacher voice is about listening to others, learning from what is being said, and leading by taking action together" (Quaglia & Lande, 2016, p. 33).

Teacher voice is not self-serving, but is concerned with the common good (Quaglia & Lande, 2016).

Summary

Staff meetings are a regular part of the school calendar; therefore, utilizing staff meetings effectively is necessary so that the time spent in those meetings is productive (Rogelberg, 2019a). At this time, no research was found that investigates the phenomenon of teacher silence during staff meetings, and research on employee silence has been found almost exclusively in the business field (Lam et al., 2018; Nechanska et al., 2020). This study can lead to changes in how principals utilize and conduct staff meetings to build collective teacher efficacy, inclusiveness, a positive school climate, and increases in student achievement.

Developing and sustaining collective teacher efficacy can be accomplished through supporting professional discourse and teacher voice in an environment of trust and safety (Bandura, 1998; Donohoo, 2017; Donohoo & Katz, 2020). Most importantly, the development of collective teacher efficacy results in schools that reach higher levels of teaching practices and increase student learning (Elfers & Plecki, 2019).

Principals' awareness of teacher silence may be the foundation of facilitating a productive staff meeting. With this knowledge of teacher silence, principals can increase their skills with reading the room during staff meetings and making adjustments during the meeting that support teacher empowerment and collective teacher efficacy. This study will lead to new understandings of the phenomenon of teacher silence so that principals are able to design and facilitate staff meetings that contain true collaboration and build authentic collective teacher efficacy.

Chapter 2

Literature Review

This study seeks to investigate how the meeting context, personal beliefs and attitudes, and the relationship between teachers and principals influence teachers' perspectives on silence during staff meetings. While employee voice is a well-investigated field, teacher silence appears to have little peer-reviewed research (Brown et al., 2021; Lefstein et al., 2020a). Teacher silence during staff meetings is an underexplored topic of study that can have significant implications related to equity, inclusivity, student achievement, and school climate.

Systems Theory

The application of systems theory to organizations was first articulated by Peter Senge in his book *The Fifth Discipline: The Art and Practice of the Learning Organization* (Bui, 2020; Senge, 1990). Systems theory views all parts of the organization as interrelated, which allows for a comprehensive understanding of issues and group dynamics.

Systems theory is built on a framework of five disciplines:

- personal mastery
- mental models
- shared vision
- team learning
- systems thinking (Senge, 2006, pp. 6-10)

In 2004, Senge added a sixth area, presence. While originally designed with businesses in mind, Senge later applied this framework to schools (Bui, 2020; Senge, 2006).

When considering the six components of systems theory, systems thinking and mental models stand out as being particularly applicable to the phenomenon of teacher silence. Senge (2006) defines *systems thinking* as "...a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of changes rather than static snapshots" (p. 68). Since systems thinking encompasses multiple factors, it allows schools to be viewed from multiple perspectives and shows interrelationships. Schools can be viewed from the perspective of individuals, teams, and organizations (Bui, 2020). Schools can also be analyzed from an issue perspective (e.g., economic, social, instructional, relationships) (Bui, 2020). Acknowledging this complexity is necessary for understanding multi-faceted phenomena, such as teacher silence. A more comprehensive understanding of the complexity of these interrelationships can also result in more appropriate actions from administrators (Senge, 2006).

Mental models are those perceptions, values, beliefs, and goals that individuals use when making decisions, as well as filtering and storing new information (Senge, 2006). These mental models can be deeply ingrained and affect how individuals respond to situations (Bui, 2020).

Theory of the Oppressed

Freire's Theory of the Oppressed (1970/2000) assumes that an individual's purpose in life is to actively participate and engage in their world so that their world is transformed, and their lives are more enriched both personally and collectively. While Freire discussed his theory in the context of teacher-student relationships, his theory can be extended to any relationship in which there is unequal power. Freire emphasized the

critical importance of authentic dialogue for building relationships and developing shared knowledge; knowledge that is co-created and not *bestowed* on another (Freire, 2000). Through discussion, all participants learn to recognize, appreciate, and respect differences in opinions and experiences. Individuals develop trusting relationships through authentic dialogue when others are consistent with their words and actions (Freire, 2000).

Freire (2000) discussed that silence can result from oppression because of self-depreciation, alienation, and not trusting in one's own knowledge and abilities. Freire warned leaders that freedom of voice is not telling someone that you want to hear their opinion; rather, this is accomplished by showing them through authentic dialogue. Two conditions are needed for authentic dialogue: (1) leaders must establish the space, trust, and context for dialogue; and (2) individuals must have a personal desire to share their ideas, experiences, and opinions (Freire, 2000). Through this interaction, the knowledge created by the group will reflect multiple perspectives, which leads to improved decision making and problem solving (Freire, 2000). Voice, not silence, is required for building trusting relationships, engagement, learning, and working together (Freire, 2000).

Interrelated Theories

Combining systems thinking (Senge, 2006) and the theory of oppression (Freire, 1970/2000) may lead to a comprehensive framework for understanding teacher silence during meetings. An individual's silence in a meeting may be related to the interrelationship between their engagement, feelings of safety, perceptions that their voice is respected and valued, and the context (Donohoo, 2017; Freire, 2000; Glickman et al., 2018; King et al., 2019; Lefstein et al., 2020a; Senge, 2006). When these

interrelationships result in silence, a meeting may be characterized by inequitable participation and the suppression of diverse voices and ideas (Aguilar, 2020; Freire, 2000; Mavrogordato & White, 2020).

Teacher Voice and Silence

Voice and silence are two separate, but related, constructs as demonstrated in real-life scenarios where individuals share their voice but are silent with their true opinions and ideas (Brinsfield, 2013; Sherf et al., 2021; Van Dyne et al., 2003). The vast majority of research on voice and silence is from the fields of business management, human resources management, organizational psychology, psychology, and organizational communication. This section describes what the literature says regarding teacher voice and silence and is augmented with research on employee voice and silence.

Teacher Voice Behaviors

Employee voice can have both positive and negative impacts on an organization (Morrison, 2011). Morrison shares, "Whether voice is good or bad for the collective [group] most likely depends on the specific message that is being conveyed and the response that is taken" (p. 401). With too much voice, employees can become overwhelmed and have difficulty reaching decisions (Morrison, 2011), or the discourse can become fragmented, counterproductive, or off-task (Allen et al., 2015; Bang et al., 2010). Despite the potential negative outcomes of voice, avoidance of disagreement can impact team learning, as it prevents ideas from becoming a part of the pool of shared meaning (Patterson et al., 2012).

Teacher voice allows opportunities for teachers to have both impact and influence on school policies and programs that affect their work and the culture of the school (Starzyk et al., 2018). Quaglia and Lande (2016) define teacher voice as:

The teachers' ability to speak openly about opinions, ideas, and suggestions in an environment that is driven by trust, collaboration, and responsibility. Teacher voice is about listening to others, learning from what is being said, and leading by taking action together. (p.33)

Teacher voice is a key component for transforming the culture of a school (Corwin, 2016). Teacher voice has the sole purpose of benefiting others; therefore, a voice that is used for self-serving purposes is not considered as teacher voice (Quaglia & Lande, 2016).

The *Quaglia Institute for School Voice Report* surveyed 30,489 educators between 2009-2018 from 415 schools in 26 states (Quaglia et al, 2020). In the study, 36% of teachers reported that they did not feel comfortable asking questions in staff meetings; 41% of teachers did not feel confident voicing their concerns and opinions; and 47% of teachers did not believe they had a voice in school decisions (Quaglia Institute for School Voice and Aspirations, 2016; Quaglia & Lande, 2016). At 47%, this means that decisions were made without input from almost half of the teachers. This could result in decisions being made by schools that do not have sufficient depth or perspective due to the lack of diversity and opinions. This is concerning because teacher voice can have a significant impact on school climate and the building of both self-efficacy and collective teacher efficacy, which are prerequisites for student learning (Donohoo, 2017; Donohoo & Katz, 2020; Dweck, 2000; Hattie, 2015). Individuals who believe that they do not have a voice

can act out in ways that undermine organizational decisions or adopt compliance behaviors instead of commitment behaviors (Brinsfield, 2013; Lam et al., 2018; Nechanska et al., 2020; Yoerger et al., 2015).

While opportunities for teacher voice can be built into the structure of the school during staff meetings and small group collaboration meetings, a significant number of teachers do not always feel able or willing to share their voices (Quaglia & Lande, 2016). Many teachers continue to feel that their voices are not being heard, appreciated, or respected by coworkers or building administrators (Quaglia & Lande, 2016). If collaborative discussions are not facilitated effectively, differences in perspectives can lead to arguments that can negatively impact collective teacher efficacy (Aguilar, 2020; Brown et al., 2021; Donohoo & Katz, 2020; Patterson et al., 2012; Philpott & Oates, 2017).

When teachers are comfortable with expressing their voices, they are three times more likely to value setting goals and working hard to reach those goals (Quaglia & Lande, 2016). Teachers are four times more likely to believe they can make a difference when they have a voice in decision-making, and they are three times more likely to encourage students to be leaders and decision makers as well (Quaglia & Lande, 2016, p. 34).

However, an increase in teacher voice does not necessarily indicate that teachers' authentic voices are expressed (Sherf et al., 2021). Principals need to look beyond observable discourse to determine the extent of employee silence in their organization (Brinsfield, 2013; Sherf et al., 2021). Teachers typically choose to only express ideas that they feel safe discussing, while they keep other ideas silent (Sherf et al., 2021). A meta-

analysis conducted by Sherf et al. (2021) emphasized, "that employees' outward behavior (voice) often does not align with or mirror their private ideas, suggestions, and concerns that remain withheld (silence)" (p. 133). The absence of silence does not mean the presence of voice (Brinsfield, 2013; Sherf et al., 2021; Yoerger et al., 2015).

Teacher Silence Behaviors

Employee silence in organizations can be present behaviorally, emotionally, and physically (Kahn, 1990; Robinson & Shuck, 2019). Silence can occur in situations where employees do not have the opportunity to express themselves or when they choose not to use their voices (Alqarni, 2020; Donaghey et al., 2011). Silence is not an absolute behavior, but it varies depending on the context of the interaction (Cain, 2012; Faure et al., 2020). Silence can allow discussions to become more robust if the purpose of the silence is for reflection, self-discipline, or a representation of respect (Faure et al., 2020). Faure et al. emphasize that when silence is used for those purposes, it does not suppress voice, but allows collaboration to flourish.

Employee silence can be intentional or unintentional (Nechanska et al., 2020).

Intentional silence occurs when an individual purposefully chooses to be silent for personal reasons (Nechanska et al., 2020; Stouten et al., 2019). Depending on the context, the individual may or may not be satisfied with their lack of voice (Brinsfield, 2013).

This can lead to positive, negative, or neutral feelings about the organization itself, as well as about the other individuals in the group (Nechanska et al., 2020). On the other hand, unintentional silence occurs when an individual wants to share their ideas, opinions, and perspectives, but something in their environment hinders their verbal participation (Lam et al., 2018; Nechanska et al., 2020).

The presence of intentional silence and unintentional silence in an organization can indicate that employees' needs are not being met (Nechanska et al., 2020). This happens when leaders intentionally or unintentionally convey the message that employees need to stop discussions and get back to doing the work that management has mandated (Brown et al., 2021; Nechanska et al., 2020). Employee silence also occurs when the social and procedural context of the meeting closes down the opportunities for robust, diverse, and equitable dialogue (Brown et al., 2021; Philpott & Oates, 2017). The supervisor's leadership style and relationships with the employees also influence silent behaviors (Robinson & Shuck, 2019).

Specific motivations for silence in the workplace. Brinsfield (2013) identified six distinct motivations for silence found in the workplace:

- ineffectual silence
- relational silence
- defensive silence
- diffident silence
- disengaged silence
- deviant silence (pp. 681-683)

Ineffectual silence is demonstrated when individuals believe that speaking up will not lead to any significant changes related to the issue, situation, or concern; therefore, they choose to remain silent (Brinsfield, 2013). Ineffectual silence reflects the feeling that expressing concerns or ideas is not worth the effort because it will ultimately not lead to positive change (Brinsfield, 2013).

Relational silence is demonstrated when employees choose to remain silent because of a concern that their message will damage a relationship with their supervisor or a co-worker (Brinsfield, 2013). Relational silence can also be motivated by altruistic purposes such as cooperation and empathy (Brinsfield, 2013).

Defensive silence is demonstrated when an individual is afraid of the potential external consequences of sharing their ideas and concerns (Brinsfield, 2013). Feelings of self-protection and fear of punishment lead to the withholding of ideas, knowledge, and concerns (Brinsfield, 2013). Defensive silence behavior is the most commonly researched aspect of silence and historically has been viewed as the primary cause of employee silence (Brinsfield, 2013; Van Dyne et al., 2003).

Diffident silence is demonstrated when individuals choose to stay silent because of personal feelings of insecurity, or it is due to uncertainty about what they could say in the situation (Brinsfield, 2013). Less confident teachers respond to tension and stress by negating their competency (Finkelstein et al., 2019). Silence can be a result of tension/stress, unfamiliarity/uncertainty about the topic, or personal insecurity about not knowing the solution/answers in a context where only certain answers are acknowledged or valued (Finkelstein et al., 2019; Quaglia et al., 2020). Glimpses of insecurity can be heard through the words of teachers themselves; therefore, leaders need to use active listening strategies (Finkelstein et al., 2019). Similar to defensive silence, diffident silence is motivated by fear; however, diffident silence is focused on intrinsic fears like embarrassment, while defensive silence is focused on external fears like losing one's job (Brinsfield, 2013).

Disengaged silence is demonstrated when individuals emotionally, cognitively, and/or behaviorally separate themselves from their jobs (Brinsfield, 2013). Disengaged silence is expressed when individuals do not care about the issue, topic, or situation being discussed (Brinsfield, 2013). When individuals do not feel like their voices are heard, they can disengage from the discussion and not even attempt to contribute their knowledge or ideas (Friere, 2000; Patterson et al., 2012).

Deviant silence is demonstrated when individuals decide to remain silent for the purposes of retaliation against another employee or the organization as a whole (Brinsfield, 2013). Deviant silence behaviors can occur when individuals feel angry or upset during a meeting, and they intentionally withhold information from the group (Patterson et al., 2012; Philpott & Oates, 2017). This motive for silence was not reported frequently (<1% of the sample); however, Brinsfield shared that it may have been underreported due to the way in which the questions were posed in the study. In the table below, Brinsfield reported the prevalence of employee silence behaviors from his study.

Table 1

Prevalence of Employee Silence Behaviors (Brinsfield, 2013)

Dimensions of Employee Silence	Percentage of Statements in Study	Total Number of Responses per Dimension
Ineffectual silence	17.48%	398
Relational silence	15.24%	347
Defensive silence	12.65%	288
Diffident silence	11.64%	265
Disengaged silence	6.63%	151
Deviant silence	0.48%	11

Employee Silence and Silence Antecedents Theory

Chou and Chang (2020) propose a theoretical framework for classifying employee silence based on the forms of employee silence and silence antecedents. The framework helps explain how employee silence is affected by the target (e.g., the manager, a peer, etc.) in context. While previous research has typically utilized theories that were based on the employee perspective of silence, this theory incorporates how the context and attributes of the specific communication partner affect an individual's decision to remain silent (Chou & Chang, 2020).

In their study, employee silence is categorized into three distinct categories: unsolicited predetermined silence, unsolicited issue-based employee silence, and solicited target-based employee silence (Chou & Chang, 2020). Each category has different silence antecedents (Chou & Chang, 2020). *Unsolicited predetermined silence* is theoretically based on the individual trait perspective and is a conscious decision by the individual to remain silent (Chou & Chang, 2020). The individual has personality traits and dispositions that reinforce their desire to stay silent, regardless of the issue that is being discussed (Chou & Chang, 2020).

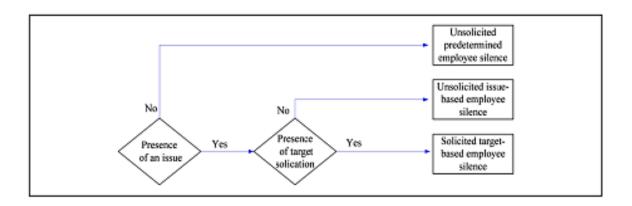
Unsolicited issue-based employee silence occurs when an individual intentionally withholds information for self-protection, retribution, power, or self-doubt (Chou & Chang, 2020). Unsolicited issue-based employee silence is based on the functional needs perspective and is a conscious decision by the individual to remain silent to satisfy functional needs (Chou & Chang, 2020).

Solicited target-based employee silence occurs after the target solicits the individual's opinion and suggestions (Chou & Chang, 2020). The individual's decision to

remain silent is based on the relationship between the individual and the target (i.e., the person who has asked for their ideas, opinions, and suggestions). The individual may choose to remain silent for a variety of reasons. For example, individuals may want to protect the relationship, have a fear of retribution/punishment, feel there is a lack of organizational support, think their voice would not make a difference, or have a history of a negative/abusive relationship with the target (Chou & Chang, 2020). These distinctions are important because understanding the impact of the target on silence behaviors can provide leaders with strategies to support collegial discussions during staff meetings.

Figure 1

Timeline of the Three Decision Bases of Employee Silence (Chou & Chang, 2020, p. 412)



Chou and Chang's (2020) framework does not factor in the behaviors of the target into the decision-making process. Since communication occurs in context, specific leadership characteristics of the target could mitigate or exacerbate the presence of teacher silence (Korobov, 2020). Intentional and unintentional teacher silence may also be influenced by leadership behaviors. In addition, the presence of an issue may not be a necessary requirement for unsolicited predetermined employee silence. Some people do not choose to speak during meetings, whether or not an issue is present (Finkelstein et al., 2019). Unsolicited predetermined employee silence may also be influenced by the

leader's behaviors and the relationship that the teacher has with the leader (Peng & Wei, 2020).

Another missing component in Chou and Chang's framework is that they do not address employee silence that is based on lack of opportunity. This is seen when an individual wants to share their ideas, but is not given the opportunity to do so. Individuals are silent because they are silenced.

Leadership

A leader's behaviors can either encourage or inhibit the discourse of their employees (Chou & Chang, 2021; Hamstra et al., 2021; Lefstein et al., 2020a). The following leadership styles have been associated with decreased employee silence behaviors: inclusive leadership, transformational leadership, authentic leadership, servant leadership, and ethical leadership (Alqarni, 2020; Choi et al., 2017; Hsiung, 2012). This section will describe the leader's responsibility for supporting employee voice, including: leadership style, school climate, perceptions of trust and safety, equity and inclusivity, and collective teacher efficacy.

Leadership Styles

Specific behaviors and leadership styles of principals appear to be key influences on employee silence (Alqarni, 2020; Robinson & Shuck, 2019; Sherf et al., 2021). The leader's ability to foster openness, trust, and build employee autonomy supports the vocal engagement of employees (Robinson & Shuck, 2019). Strengthening leadership styles can support a voice culture characterized by employee engagement, trust, risk-taking, feeling valued, confidence, security, and empowerment (Robinson & Shuck, 2019).

An inclusive leadership style is based on the formulation of reciprocal relationships and is characterized by a focus on open communication, valuing differing opinions, and meeting the needs of followers (Choi et al., 2017). Jolly and Lee (2021) reported an impactful direct relationship between inclusive leadership practices and employee descriptions of positive relationship attachment with the leader. Inclusive leadership practices that support this relationship lead to employees feeling valued, appreciated, and connected with the leader and the organization (Jolly & Lee, 2021). Leaders must be perceived as caring, tolerant, and empathetic towards employees to enhance organizational effectiveness and authentic sharing of ideas (Chou & Chang, 2020). Selecting leaders based on their personal leadership style could support employee voice behaviors and engagement in work teams (Jolly & Lee, 2021).

Managers who exhibited openly narcissistic trait behaviors (Hamstra et al., 2021) and principals who relied on directive leadership behaviors (Alqarni, 2020; Sherf et al., 2021) were associated with increased organizational silence. Larwin et al. (2015) conceptualized the theory of *subtractive leadership*, which is a form of leadership focused on the personal agenda of the leader, and there is no consideration for what is best for the organization as a whole. Subtractive leadership reduces the productivity of the organization, undermines stakeholder commitment, and builds distrust among stakeholders (Larwin et al., 2015). Recognizing the behaviors and impact of dysfunctional leaders (e.g., narcissistic, subtractive, etc.) is important for a comprehensive understanding of how leadership behaviors can influence the phenomenon of teacher silence.

Leader Responsibility for Supporting Discourse

To encourage discourse, administrators should assess the channels of communication within the organization and make sure that there are ways for all employees to authentically express themselves (Deal et al., 2009; Freire, 2000; Nechanska et al., 2020). Principals should be encouraging and engaging teachers in pedagogically productive talk for improved depth of discussion when analyzing problems of practice (Lefstein et al., 2020b).

Principal behavior that supports robust discourse includes:

- planning and implementing high quality and engaging professional development,
- focusing on innovative initiatives that are relevant and meaningful to the specific needs of the school,
- focusing on life-long learning,
- including diverse voices in all aspects of the school, and
- cultivating relationships among staff (Alqarni, 2020; Berg & Homan, 2021).

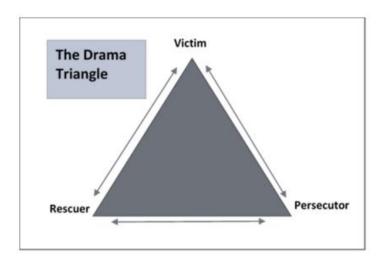
The intentional and strategic focus on developing professional relationships and voice among teachers can lead to an increased willingness of teachers to try new teaching strategies/practices, share their knowledge with other teachers, and devote more time and energy to solve problems of practice (Darling-Hammond, 2014; Friere, 2000; Quaglia & Lande, 2016).

The Drama Triangle in Figure 2 below can be utilized to better understand the dynamics of the communication patterns between individuals with a specific focus on

what patterns can lead to maladaptive communication behaviors (Clark, 2020; Karpman, 1968; Morgan, 2014). The Drama Triangle is a visual representation of the specific roles that individuals can play as they communicate with one another. The roles are: persecutor/bully, rescuer/savior, and victim/helpless (Morgan, 2014). Communication is hindered when individuals assume those roles because of the presence of unequal power, codependency, and a strict hierarchical structure (Clark, 2020; Morgan, 2014).

Figure 2

The Drama Triangle (Clark, 2020, p. 86)



Within the Drama Triangle model, communication can be improved when the role of persecutor is changed to challenger or project champion, the role of rescuer is changed to coach or talent broker, and the role of victim is changed to survivor/thriver or knowledge leader (Clark, 2020; Morgan, 2014). Leaders must lead the change in redefining roles to ones that support healthy communication patterns (Darling-Hammond, 2014; Freire, 2000; Morgan, 2014). Role changes occur when leaders intentionally: increase their use of active listening, state clear expectations and boundaries, provide

choices, are consistent with their words and actions, build capacity of others, and support individuals advocating for their needs (Clark, 2020; Morgan, 2014).

Gains in student achievement and decreases in student dropout rates and absenteeism have been reported when teachers' voice is encouraged and supported by building administrators (Darling-Hammond, 2014; Glickman et al., 2018). Darling-Hammond notes, "At the end of the day, collaborative learning among teachers will do more to support student achievement than dozens of the most elaborate ranking schemes [teacher evaluations] ever could" (p. 5).

Supportive Climate

School climate is the collection of perceptions from school members about the school, including: the attitudes or mood of the school, the quality of the relationships, how individuals interact and influence each other, and their shared experiences (Alqarni, 2020). A supportive school climate is characterized by open communication and is associated with improvements in student achievement and learning (Alqarni, 2020; Goddard et al., 2015).

Supportive and resilient leadership practices empower employees to share their ideas and engage in creative problem-solving (Robinson & Shuck, 2019). In a supportive school climate, the principal strives to build the capacity of all of their teachers through engaging and meaningful discourse (Glickman et al., 2018). Teachers vary in their levels of commitment, instructional expertise, and development (Glickman et al., 2018). The principal needs to be cognizant of these differences when establishing a supportive school climate that utilizes discourse to build the capacity of each teacher (Chou & Chang, 2021; Glickman et al., 2018). In addition, growth mindset practices and an intentional focus on

staff as learners will facilitate building a positive school climate (Donohoo & Katz, 2020; Dweck, 2000).

When leaders are given a suggestion or idea from an employee that they do not agree with or are not able to act upon, it is crucial that the leader provides the employee with specific acknowledgment and feedback about their suggestions (King et al., 2019). If this does not occur, it is unlikely that the employee will provide suggestions or ideas in the future (Chou & Chang, 2021; King et al., 2019). *Voice resilience* is a behavior that is necessary for open communication. If suggestions or ideas are not adopted, the individual knows that they are considered, and it is more likely that they will continue to make suggestions in future discussions (King et al., 2019). "Voice resilience may be of particular interest to organizations seeking to foster inclusion for underrepresented groups" (King et al., 2019, p. 553), especially if the voices of those individuals have been marginalized in the past (Aguilar, 2020).

Trust and Safety. Perceptions of safety and trust significantly influence an individual's decision whether or not to remain silent (Freire, 2000; Kahn, 1990; Robinson & Shuck, 2019). Expressing opinions and ideas in a group setting involves the risk of criticism and embarrassment (Peng & Wei, 2020; Sherf et al., 2021). Voice can be viewed as a potentially risky behavior since it may be interpreted as challenging the status quo, even if the original intent is constructive feedback (Detert & Edmondson, 2011; Peng & Wei, 2020). Using voice carries risk because misunderstandings and interpersonal issues may result if the communication does not go as anticipated (Chou & Chang, 2021). Therefore, individuals consciously or unconsciously engage in a cost-benefit analysis of whether or not to use their voice in situations--asking if their voice will be effective, appropriate, and

safe in that particular context (Chou & Chang, 2020; Detert & Edmondson, 2011; Kwon & Farndale, 2020; Sherf et al., 2021). Osman and Warner (2020) refer to this process as expectancy-value-cost and share that the following questions are considered: Does the individual expect to be successful when voicing ideas/concerns? Is the message valuable? What is the potential cost of speaking up? Bandura (1998) notes, "unless people believe they can produce desired effects by their actions they have little incentive to act" (p.3). This supports Osman and Warner's (2020) expectancy-value-cost theory.

Behavioral integrity is the perceived alignment between an individual's words and deeds, and it entails "both perceived promise-keeping and the perceived degree of match between espoused and enacted values, regardless of the morality of the principle" (Peng & Wei, 2020, p. 507). That is, when a leader says something, they mean it and will consistently follow through with their actions (Sinek, 2018). Organizations are strengthened when team members collectively believe that all decisions and actions should be guided by ethical behavior and moral convictions (Peng & Wei, 2020).

When a leader's ethical values are perceived as being high, increases in employee voice are found (Peng & Wei, 2020). When leaders demonstrate higher levels of ethical and behavioral integrity, employees are more likely to voice their true ideas and opinions since they are better able to anticipate the leader's responses (Peng & Wei, 2020). A lack of ethical integrity is demonstrated when a leader says what others want to hear instead of telling the truth, which erodes trust within an organization and can decrease open communication within the organization (Sinek, 2018).

Creating an organizational climate where employees are expected to follow their moral and ethical beliefs also helps build an independence climate that provides a setting

that values honest employee voice (Patterson et al, 2012; Peng & Wei, 2020; Sinek, 2018). Ultimately, "integrity is not about being honest when we agree with each other; it is also about being honest when we disagree or, even more important, when we make mistakes or missteps" (Sinek, 2018, p. 189). This builds trust, which is critical for teacher voice.

While manipulative in nature, if a manager has narcissistic trait tendencies, but they give the *appearance* of being sincere, employees are less likely to remain silent about important information and issues (Hamstra et al., 2021). Therefore, managers who have narcissistic traits can mediate the effects of their narcissism and increase their trustworthiness by engaging in impression management (Hamstra et al., 2021). Hiring and promoting decisions within organizations should assess narcissistic traits in current and future managers due to the negative impact that unmediated narcissism can have on employee silence and feelings of trust (Hamstra et al., 2021).

Feelings of trust and safety are also strengthened when conversations about organizational issues and problems of practice are depersonalized, meaning they are viewed through a more objective lens and words that denote value labels are taken out (Daly et al., 2020). When discussion topics are depersonalized, the focus of the discussion changes to one in which intellectual curiosity is encouraged (Daly et al., 2020). Connections to other systemic issues are analyzed, which is "a prerequisite for making what is normally hidden 'discussable'" (Daly et al., 2020, p. 345). When value judgments persist during discussions, teacher voice can be silenced (Daly et al., 2020).

If all teachers' voices are required as a part of meetings, there may be some pushback from teachers who feel insecure (Finkelstein et al., 2019). Some teachers

reported that they do not feel smart enough to have a voice or opinion, and other teachers reported that they do not want to voice their ideas or concerns because they are afraid of giving the wrong answer (Brinsfield, 2013; Chou & Chang, 2020; Finkelstein et al., 2019). Developing a growth mindset climate can assist with alleviating these issues (Dweck, 2000). Leaders have the responsibility to establish a work climate where individuals feel comfortable and safe expressing their opinions and ideas (Chou & Chang, 2020).

Equity and Inclusivity

For equity and inclusivity, principals and teachers must be able to engage in authentic discourse about school policies, initiatives, procedures, and problems of practice (Aguilar, 2020; Berg & Homan, 2021; Mavrogordato & White, 2020; Yukl, 2010). School leaders play a significant role in determining who talks and how much during a meeting (Mavrogordato & White, 2020). Hierarchies should be flattened, and leaders must specifically demonstrate a value that all teacher voices are necessary for the school to develop into a trusting and safe learning environment (Lefstein et al., 2020a; Yukl, 2010). When individuals in a group are marginalized, the learning of the entire group is reduced, including the individuals who have marginalized others (Adamson & Walker, 2011; Little, 2002).

When diverse voices and opinions are expressed during discourse, there is a risk that individuals may feel disrespected if others do not actively support their ideas (Patterson et al., 2012; Quaglia et al., 2020). Whenever individuals feel that they are being disrespected during a conversation, the interaction stops being about the original purpose and becomes about defending dignity (Patterson et al., 2012). Individuals need to

know that the organization values the diversity of ideas, and solving problems of practice are facilitated through diverse ideas (Aguilar, 2020; Patterson et al., 2012; Vedder-Weiss et al., 2018).

Systemic organizational change is needed for equity, and this systemic change is dependent upon school leaders supporting professional and reflective discourse among team members (Aguilar, 2020; Berg & Homan, 2021; Preston & Donohoo, 2021). Toxic positivity can occur when teachers feel that they must always view change initiatives with a positive attitude (France, 2021). This mindset can result in the silencing of dissenting voices and can distort reality, as teachers feel that they must project positivity in all situations (France, 2021). Berg & Homan (2021) share:

District leaders must model vulnerability and support school leaders to do the same, and they must cultivate relationships that give all permission to be warm demanders of each other. Compliance culture is the enemy of equity; we need educators to be willing to say what needs to be said and to hear what's being said" through the inclusion of diverse voices. (p. 81)

Collective Teacher Efficacy

Collective teacher efficacy (CTE) is the collective belief of a group of educators that through their combined efforts, they can positively influence the achievement and learning of *all* students in their school (Bandura, 1998; Donohoo, 2017; Donohoo & Katz, 2020). Collective teacher efficacy is identified by Hattie (2015) as being a high impact strategy for increasing student learning and achievement. An effect size of 1.57 makes it the most impactful strategy for increasing student achievement (Hattie & Clarke, 2018). The development of collective teacher efficacy can result in schools reaching

higher levels of teaching practices, resulting in increases in student learning (Elfers & Plecki, 2019; Preston & Donohoo, 2021). The focus on developing sustainable and collaborative teaching practices is critical (France, 2021), as "there is no way that a system will make an overall difference to student achievement by working one teacher at a time" (Hattie, 2015, p. 5).

Leaders should prioritize and develop teacher collaboration capacity and professional discourse because those skills will lead to significant gains in student learning (Donohoo & Katz, 2020; Fullan & Quinn, 2016; Hattie, 2015; Preston & Donohoo, 2021). *Teacher collaborative capacity* entails the deliberate use of teamwork that supports teachers learning from each other, improves implementation of new policies, develops networks of communication, and builds trusting relationships and positive building climates (Hargreaves & Fullan, 2012). Despite the stereotypical view of teachers working in isolation, teachers report that they value both formal and informal collaboration; however, they rely on administrators to provide time in their daily schedule for collaboration (Woodland & Mazur, 2019). Teachers who work collaboratively in teams experience the greatest gains in student learning and have a lower rate of turnover and job dissatisfaction (Darling-Hammond, 2014).

Enabling conditions for the development of collective teacher efficacy include:

- allowing teachers to have a real say in decision making,
- establishing consensus on the goals/vision for the school,
- recognizing the various roles and responsibilities of individual staff
 members in the school,
- staff members agreeing on the educational philosophy for the school, and

• a responsive leader leading the school (Donohoo, 2017; France, 2021). In addition, a positive school culture is a necessary context (France, 2021). Collective teacher efficacy does not mean that all classrooms look the same or that all teachers teach in the same manner, rather that all educators are focused on the same goals and vision (France, 2021).

To build collective teacher efficacy in their schools, leaders must advocate for and purposefully plan the inclusion of teachers' voices in the school (Donohoo, 2017).

Leaders must be aware of not highlighting the superstars of the school, which may set up a comparison or competition between teachers (Donohoo & Katz, 2020, p. 23). Collective teacher efficacy "cannot be realized in a culture where there are pockets of low expectations because of the critical mass needed to do the work necessary to achieve innovative and lasting change" (Donohoo & Katz, 2020, p. 24).

Just as educators must not label students, teachers should also not be labeled and put into groups based on perceived ability (Donohoo, 2017). The expectations that leaders have of teachers will likely become self-fulfilling prophecies. If teachers believe that the principal does not value their ideas and knowledge, they will not put forth the effort or engage in discussions, which can reinforce the principal's original perspective that those teachers are not effective (Donohoo & Katz, 2020). Leveling the hierarchy so that all individuals in the network are viewed as valued and respected creates a climate where collective teacher efficacy can be built, and all voices are heard and valued (Donohoo, 2017; Vedder-Weiss et al., 2018). When leading conversations, leaders should pose questions that challenge current practices or "interrupt the status quo" (Preston &

Donohoo, 2021, p. 30). Reflective questions in a safe space allow for new learning and for all educators to develop critical thinking and resilience (Preston & Donohoo, 2021).

Lack of teacher voice negatively impacts the development of self-efficacy, collective teacher efficacy, and student achievement (Donohoo, 2017; Dweck, 2000; Fisher et al, 2016). In schools where there is a lack of CTE, the school culture is characterized by feelings of negativity, hopelessness, poor decision-making, and lack of resiliency or persistence when things become challenging or during times of crisis (Donohoo & Katz, 2020). Lack of CTE is also reflected in an absence of goal setting or goal setting that is not rigorous, a decreased effort for job responsibilities, and low expectations for student learning (Donohoo & Katz, 2020). As a result, one of the principal's most important roles related to discourse is to intentionally establish and maintain a school climate that supports and sustains collective teacher efficacy (Donohoo & Katz, 2020). Embracing crucial conversations and ensuring safe spaces for discussion can build the capacity of all staff to achieve the shared school vision (Donohoo & Katz, 2020; France, 2021; Glickman et al., 2018; Preston & Donohoo, 2021).

Meetings

Staff meetings are a regular and mandatory event in the school environment and are focused on "deliberating the affairs of the school" (Mafa, 2016, p. 61). While meetings sometimes get a negative reputation, they are not inherently a waste of time (Abu-Shreah & Al-Sharif, 2017; Bernstein & Ringel, 2018; Mafa, 2016; Rogelberg, 2019a). Rogelberg continues:

For good things to happen, [however,] the meeting must tap into each attendee's relevant and critical knowledge, insights, and perspectives. If attendees don't

share key information and insights relevant to meeting goals, especially information they hold uniquely, the meeting is destined for mediocrity, at best. (p. 106)

Nevertheless, teachers frequently perceive and report that their voice is not valued or acted upon by leaders during meetings (Mavrogordato & White, 2020; Quaglia et al., 2020).

If leaders can change their mindset and use meetings as a tool designed to support engagement and robust discussion, staff meetings could be more effective and impactful (Mafa, 2016; Scott et al., 2015). Meetings should be seen as an opportunity to build collective teacher efficacy through robust, pedagogically productive talk instead of a mandated, rote activity (Lefstein et al., 2020b; Scott et al., 2015). How a meeting is designed can either promote or silence diverse voices, and the group norms for a meeting can affect who participates and how they participate in the meeting (Scott et al., 2015).

When meetings are designed and implemented in a way that builds employee engagement, participation, inclusion, group cohesion, communication, and buy-in with organizational goals/vision, they can be transformational to an organization (Bernstein & Ringel, 2018; Rogelberg, 2019a; Stohl, 2001). Meetings can create a sense of belonging among employees, which can lead to increased resiliency, adaptability, and agency during times of organizational crisis and stress (Rogelberg, 2019a).

Best Practices for Meetings that Encourage Discourse

While many books have been written about best practices for planning and conducting meetings from a practical viewpoint, few were found that specifically addressed the topic of employee silence from a research or theory-based perspective

(Lefstein et al., 2020a; Rogelberg, 2019a). Topics in this area that especially relate to employee silence include: meeting clarity and relevance, the pre-meeting conversation, starting the meeting on time, and interactional fairness.

Meeting Clarity and Relevance. Determining what needs to happen at the meeting for it to be considered successful should be a guiding question when planning the meeting agenda. "If the meeting is wildly successful, what will people *feel, know*, and *do* as a result" (Bernstein & Ringel, 2018, para. 7). Goal clarity has a positive effect on team effectiveness during a meeting and supports focused discussions among team members (Assof et al., 2018; Bang et al., 2010; Mavrogordato & White, 2020). When a clear discussion focus is included as a component of the meetings, employees tend to be more satisfied with the meeting (Mroz et al., 2018).

The use of a meeting agenda does not automatically result in meeting satisfaction or productivity (Rogelberg, 2019b). The planned agenda must be relevant and meaningful to those included in the meeting (Rogelberg, 2019b). Design thinking that includes clarity of the details, the transitions/flow, the experience of the participants, and the order of the agenda items can make the difference between a productive meeting and a wasteful meeting (Bernstein & Ringel, 2018; Rogelberg, 2019a). The meeting agenda should revolve around interactive experiences and opportunities for the participants that promote engagement (Mavrogordato & White, 2020; Rogelberg, 2019b). If the meeting topic is not able to be presented in an interactive and engaging manner, then that content should be communicated in another format such as an email, or the meeting time allocated to that information should be brief (Rogelberg, 2019b). A detailed meeting agenda should be provided to all team members before the meeting (Cohen et al., 2011). This practice

improves discussion since all participants have the opportunity to think about those issues/topics prior to the meeting (Cohen et al., 2011).

The Pre-meeting Conversation. The mood and type of communication at the beginning of the meeting are predictive of the mood and type of communication at the end of the meeting (Allen et al., 2014; Zijlstra et al., 2012). Leaders should pay attention to conversations during the pre-meeting phase to detect and counteract the emergence of negativity that could affect the meeting, as well as to encourage a positive climate before the meeting begins (Allen et al., 2014).

The pre-meeting time typically consists of the 5-10 minutes before the meeting begins and is characterized by small talk, work talk, meeting preparatory talk, and shop talk (Allen et al., 2014; Mirivel & Tracy, 2005). Small talk is a conversation that is related to non-work topics (e.g., movies, tv shows, sporting events, weather, hobbies, etc.) (Allen et al., 2014). Only small talk was related to meeting effectiveness, as the other types of talk did not have an impact on meeting effectiveness (Allen et al., 2014). Therefore, managers should encourage small talk at the beginning of the meeting since "small talk can help build relationships among coworkers and may promote a level of comfort that allows people who normally do not speak up at meetings the opportunity to feel less nervous during the meeting itself" (Allen et al., 2014, p. 1077). The benefit of pre-meeting talk was higher for low-extroversion participants and engaging in pre-meeting talk appeared to lead them to feel more comfortable with participating in the meeting itself (Allen et al., 2014).

Starting on Time. Initially, the discourse during the pre-meeting phase is characterized by positive or polite conversation; however, if individuals are kept waiting, negative

comments begin to increase in number (Lehmann-Willenbrock et al., 2013). When meetings start late, people report decreased satisfaction with the meeting itself (Allen et al., 2018; Lehmann-Willenbrock & Allen, 2020). Beginning a meeting five minutes late does not have long-term effects, but ten minutes late significantly impacts reporting of meeting effectiveness (Allen et al., 2018). Meetings that begin late, even if the meeting is not shortened in duration, have fewer instances of problem analysis, idea generation, and elaboration of ideas (Lehmann-Willenbrock & Allen, 2020). In addition, when meetings begin late, there are fewer instances of polite comments and courteous behaviors between employees, and there is an increase in the number of negative statements (e.g., criticizing, complaining) during problem-solving discussions (Lehmann-Willenbrock & Allen, 2020). These behaviors can negatively affect the group's ability to gain consensus and solve problems of practice constructively, since complaining behaviors prevent effective problem-solving (Lehmann-Willenbrock & Allen, 2020). Interactional Fairness. Interactional fairness in meetings increases the likelihood that individuals will actively participate in the meeting (Kauffeld & Lehmann-Willenbrock, 2012). Research has established the importance of discussion protocols (Lefstein et al., 2017), skilled discussion facilitators (Philpott & Oates, 2017), and a sense of equality in status among group members (Adamson & Walker, 2011; Peercy et al., 2015) to support interactional fairness. Ensuring interactional fairness must be intentional. Merely providing opportunities for teachers to collaborate and discuss does not automatically result in interactional fairness during the meeting (Aguilar, 2020; Allen & Rogelberg, 2013; Donohoo & Katz, 2020; Sinek, 2018).

Why Meetings are Sometimes Not Productive

A variety of factors can impact the effectiveness of meetings, especially related to employee silence. Research in the field of meeting science indicates that when meetings are not intentionally designed and when there is a lack of trusting relationships, the participation and engagement of employees during meetings will decrease (Allen, et al., 2014; Allen & Rogelberg, 2013; Rogelberg, 2019a). This section will discuss the possible influence of the following constructs on teacher silence: preference falsification, surface acting, like-kind preference, and disengagement.

Preference Falsification. Preference falsification occurs when an individual decides to state a preference or opinion that is not aligned with what they truly want or believe (Kuran, 1997; Vedantam, 2020); it is in direct contrast to their personal preferences. A desire to fit in, to not create dissent, or to reveal too much about personal feelings can lead to preference falsification (Kuran, 1997; Vedantam, 2020). On the other hand, public preferences are those preferences that an individual is willing to share in a particular situation (Kuran, 1997). Engaging in preference falsification can be detrimental to a school community, especially in terms of decision making and discussions of problems of practice (Aguilar, 2020). Preference falsification restricts the flow of information and prevents the sharing of diverse ideas (Aguilar, 2020; Allen & Rogelberg, 2013; Donohoo, 2017; Patterson et al., 2012).

Preference falsification is consistent with teacher silence because the teacher's true, authentic voice is not heard by the group. Contrived congeniality or toxic positivity are also related to preference falsification and occur when people pretend to value and respect others, but internally they do not feel that way (France, 2021; Hargreaves &

Fullan, 2012). In those situations, individuals feel pressured to agree with the group so that they are not viewed as being negative or naysayers (France, 2021). Inauthentic discussion and eroding of trusting relationships can result from preference falsification (Hargreaves & Fullan, 2012).

Surface Acting. Surface acting occurs when individuals modify their outward emotions and express either verbal and/or nonverbal agreement with others, even though they do not truly feel that way (Hochschild, 1983). This behavior has been studied extensively in the customer service context, but studies were not found related to the school context.

Individuals choose to use surface acting to participate appropriately according to group norms or expectations for behavior (Shanock et al., 2013). The effort required to maintain surface acting can decrease energy for decision making, discussion, and goal setting, as well as lead to emotional exhaustion (Diestel & Schmidt, 2012; Johnson, 2021; Shanock et al., 2013). When employees feel that they need to use surface acting to participate in meetings, group performance is negatively impacted both before and after the meeting (Erks et al., 2017). In surface acting, the employees' true voices are not heard, leading to a silencing of ideas and opinions. However, when employees feel that they do not have to engage in surface acting, their cognitive and emotional energy can be focused on active listening, meaningful engagement, and discussion (Shanock et al., 2013). In addition, they perceive the overall meeting as more effective and meaningful (Shanock et al., 2013).

Like-Kind Preference. Individuals tend to define themselves in certain ways based on their experiences and interactions with others (Fiske & Lee, 2008). These self-definitions can lead people to categorize and link themselves with others who they view as having

similar characteristics and viewpoints, which may lead them to view others in negative ways (Fiske & Lee, 2008). Differences in group members' ages can also affect the amount of discourse between individuals, as more conversational interactions are found between individuals of similar ages (Gerpott & Lehmann-Willenbrock, 2015).

During meetings, individuals with like-kind relationships have a greater tendency to interact, compared with those who are not in the "in-group" (Makela et al., 2007). In addition, the "in-group" tends to dismiss the discourse of individuals outside their group through an increase in overly critical feedback or by not acknowledging ideas (Gerpott & Lehman-Willenbrock, 2015: Polzer et al., 2002). This behavior can lead to the silencing of voices (Gerpott & Lehmann-Willenbrock, 2015).

Disengaged Teachers. Disengaged teacher behavior is highly correlated (d = 0.52) with organizational silence (Alqarni, 2020). When individuals attend meetings that are lacking in clarity, or they perceive that there are too many meetings, they report less engagement with their work (Mroz et al., 2019). Employee engagement drives organizational outcomes such as performance, goal attainment, problem-solving, and job satisfaction (Albrecht et al., 2015). A comprehensive understanding of the relationships between employee silence and engagement during meetings can assist with developing meeting structures and strategies that support engagement (Robinson & Shuck, 2019).

Deficiencies in the Evidence

Employee silence can be categorized based on the employee's perspective or from the viewpoint of the leader (Chou & Chang, 2020). Silence, however, can only be measured within a context, and it involves the link between the silent one and the target of that silence (Chou & Chang, 2020). Consideration of how the employee and the target

interact to generate a particular type of employee silence is necessary so that the reason for the employee's silence is better understood (Brinsfield, 2013; Chou & Chang, 2020). Without a comprehensive understanding of the cause and type of employee silence, the leader will have difficulty supporting inclusive discourse and effective collaboration during meetings (Brinsfield, 2013; Chou & Chang, 2020).

The vast majority of research studies focused on the topic of employee silence in the business field, not in the context of schools or education (Brinsfield, 2013; Lam et al., 2018; Nechanska et al., 2020; Scott et al., 2015). Moreover, the existing research from multiple disciplines did not address whether employees were satisfied with their level of silence during meetings. Additional research is needed to augment the anecdotal observations of teacher silence in meetings conveyed in nonacademic literature (e.g., blogs, online articles, etc.).

Some researchers emphasize that employee silence must be minimized due to its negative impact on workplace climate and productivity (Brinsfield, 2013; Rogelberg et al., 2012). Other researchers highlight the value of employee silence as it relates to preserving relationships and encouraging reflective thinking (Chou & Chang, 2021; Lefstein et al., 2020a). A comprehensive understanding of teacher silence is necessary so that principals are able to make adjustments during staff meetings that support teacher engagement and build collective teacher efficacy.

Summary

Teacher silence during meetings can lead to unexpressed opinions, ideas, and questions, which result in feelings of stress, anxiety, or frustration (Rogelberg et al., 2012). Meetings that are not viewed as effective or meaningful cost organizations and

employees more than just the time spent in the meeting (Rogelberg et al., 2012). Frequently, a cooling-off period is needed after an unsatisfactory or ineffective meeting, which is referred to as *meeting recovery syndrome* (Rogelberg et al., 2012). This recovery takes up the time and energy of the meeting participant, as well as other individuals who end up listening to the employee complain and decompress after the meeting (Rogelberg, 2019*a*). Therefore, the silence of teachers can have long-lasting effects on the climate of the school and the teachers' ability to function as a cohesive team (Lefstein et al., 2020a; Yukl, 2010).

Silence should not be automatically viewed as a negative behavior (Cain, 2012; Chou & Chang, 2021; Faure et al., 2020; Lam et al., 2018; Patterson et al., 2012; Shanock et al., 2013). Silence can be utilized to promote meeting efficiency and to deescalate tensions (Lam et al., 2018; Shanock et al., 2013). Silence can be a strategy that encourages contemplation and deep reflection on topics and problems of professional practice (Cain, 2012; Chou & Chang, 2021; Patterson et al., 2012). Silence may be viewed as more comfortable depending upon introvert and extrovert personality characteristics (Cain, 2012; Chou & Chang, 2021; Lefstein et al., 2020a).

The majority of research on silence has been conducted in the business world and has focused on the influence of risk and safety as motivators for staying silent in the workplace (Brinsfield, 2013; Chou & Chang, 2021; Detert & Edmondson, 2011; Kwon & Farndale, 2020; Sherf et al., 2021). Little research was found that investigated teacher silence, and most of the research found was focused on the influence of trust and safety as motivators for staying silent (Brinsfield, 2013). Research conducted by Brinsfield expanded the view of silence as multi-dimensional and further identified six main

motivations for employee silence: deviant silence; relational silence; defensive silence; diffident silence; ineffectual silence; and disengaged silence. More research is needed to investigate these six dimensions of silence in a variety of contexts (e.g., large group, small group, homogeneous groups, heterogeneous groups, etc.), incidents (e.g., policy issues, decision making, threat situations), communication mediums (e.g., video-conferencing, in-person), and other levels of analysis (e.g., teams, organizations) (Brinsfield, 2013). The effect of the leader's behavior and leadership style should also be investigated as an influence on teacher silence (Robinson & Shuck, 2019).

Administrators need to understand teachers' reasons for silence during meetings so that they can recognize the different motivations for silence among their staff. This would allow them to intentionally engage teachers during staff meetings and modify meetings in real time when teacher silence appears to be negatively impacting the staff meeting. Leaders should make sure that those who want to speak have the opportunity and support to do so. Additionally, leaders need to ensure that those who are choosing to be silent are satisfied with that decision and are not perceiving that their silence is a result of oppression or lack of opportunity.

Chapter 3

Methodology

This study examines the phenomenon of teacher silence during staff meetings. A better understanding of teacher silence is necessary so that principals are able to support teacher engagement, equity, and collective teacher efficacy (Chou & Chang, 2020; Donohoo & Katz, 2020; Fullan & Quinn, 2016). Collective teacher efficacy has been identified as the most impactful strategy for increasing student learning, with an effect size of 1.57 (Hattie & Clarke, 2018). Without a comprehensive understanding of the reasons for teacher silence during staff meetings, the principal will have difficulty supporting equitable and inclusive discussions (Brinsfield, 2013; Chou & Chang, 2020; Mavrogordato & White, 2020), which are a necessary component for collective teacher efficacy (Darling-Hammond, 2014; Donohoo & Katz, 2020; Elfers & Plecki, 2019; Fullan & Quinn, 2016; Glickman et al., 2018).

This study investigates how silence presents itself in the context of school staff meetings, the influence of target behavior on teacher silence, and how silence during staff meetings is perceived by teachers. As indicated in the previous chapter, the specific research questions are:

- 1. What are teachers' reasons for being silent during staff meetings?
 - a. Are they satisfied with their level of silence during staff meetings?
 - b. Do teachers come to the staff meeting planning on being silent?
- 2. What do teachers indicate reinforces silence behaviors during staff meetings?
 - a. Does the format of the staff meeting contribute to silence?

- b. Does the behavior or leadership characteristics of the principal contribute to their silence?
- 3. Do teachers report any benefits or drawbacks of being silent during staff meetings?

Participants

In Q-methodology, the participants are purposefully selected so that a variety and range of perspectives on the phenomenon are captured (Watts & Stenner, 2012). The participants for this study were 39 full-time public-school teachers from various districts in northeast Ohio and western Pennsylvania. The participant number was chosen based on Stainton Rogers (1995), who considered 40-60 participants an adequate number for Q-methodology. Brown (1980) and Stephenson (1953) stated that even fewer participants would be sufficient for a good analysis.

Current full-time public-school teachers were invited to participate in the research study through purposive sampling using targeted electronic communication (e.g., Facebook, emails). Interested participants were invited to participate in the study through electronic communication so that they did not feel pressured to participate.

The email included a general description of the study and an individual link to the Q Method Software program. This link ensured anonymity as each participant was given a unique four letter/number identification number. Their name was not entered in the Q Method Software program at any point. Informed consent was provided when the participants enter the Q Method Software program. The participants completed the Q sort and follow up survey through this online web-based program. At any time, the

participants could leave the Q-sort program and discontinue their participation in the study.

To ensure the diversity of participants, the researcher collected demographic information from participants to ensure that varying perspectives were represented in the final sample. Demographic information collected included: race/ethnicity, gender identification, number of years teaching at their current school, age, general category of the district in which they work (urban, rural, suburban), union membership, and personal rating of their level of silence during staff meetings. and informed consent.

Instrumentation: Developing the Concourse

The first step in Q-methodology involves defining and building a concourse (Watts & Stenner, 2012). A concourse is a collection of statements that reflect possible perspectives on the research topic (Watts & Stenner, 2012). An effective Q-set contains concourse statements which make their own individual contribution to the Q set, and are not redundant (Watts & Stenner, 2012). Additionally, the final concourse statements should not be biased towards a particular viewpoint (Watts & Stenner, 2012).

To define and build this concourse, a thorough examination of peer-reviewed literature related to employee silence and teacher silence was completed with a focus on publications from 2015-2021. Research from Chou and Chang (2021) and Robinson and Shuck (2019), informal interviews with current educators, and published articles and books on the topics, resulted an initial concourse of statements related to the topics. This initial concourse of statements was then adapted to reflect the context of staff meetings in the school setting. The original concourse consisted of 60 statements (*See Appendix A*).

The researcher printed the statements on individual cards that could be sorted. The number of the statement was written on the back of each card so that the results of the sorting could be easily recorded. Understanding how each statement was sorted was necessary so that the statements could be combined into a smaller concourse. The goal was to have a concourse of 30 statements so that the actual sort during the study would not take the participants longer than 30 minutes (K. H. Larwin, personal communication, December 2, 2021). The researcher personally sorted the statements into three categories (*true for me, neutral, not true for me*) to discover how the statements may be sorted and if there appeared to be equal distribution across all three categories. The initial researcher sort revealed a fairly equivalent distribution (24, 19, 17); however, some statements appeared to be repetitive. Rather than reduce the concourse at that time, the researcher decided to do a pilot study with three individuals and use those results to help reduce the concourse.

Pilot Study

For the pilot study, four individuals completed the general sort of statements into the three categories (*true for me*, *neutral*, *not true for me*). The guiding question for the sort was "When I am in a staff meeting, my behavior and mindset are...". The participants were given the instructions to not spend a lot of time on each item, but to trust their first impression. None of the participants asked clarifying questions during the sorting process. Each participant took no more than five minutes to complete the sort. After each participant sorted the statements, the researcher took the three piles of statements and documented which statements belonged to each category. The numbers of the statements were then entered into a spreadsheet so that the researcher could compare

and contrast which statements were similar across all participants. This comparison also allowed the researcher to view the general distribution of statements across each category. One participant had a large number of statements that were sorted as neutral (32 statements), while the other three participants had a similar number of neutral statements (17, 19, 20).

Based on the analysis of the response patterns and feedback from the participants, the researcher then removed the statements that were not directly applicable to the research questions, as well as statements that provided similar information. The researcher reflected upon the remaining statements and realized that many of the statements that specifically mentioned "silence" were worded in a negative way. Based on the literature review, silence should not automatically be viewed as a negative behavior (Cain, 2019; Chou & Chang, 2021; Lefstein et al., 2020a). In addition, research by Cain (2019) emphasized the value of silence for people who are introverted. Therefore, the researcher reworded some of the statements and added in additional statements that reflected the positive side of silence. Upon reviewing the remaining statements and re-reading the literature review, the researcher determined that some aspects of teacher silence were missing from the concourse. This resulted in 32 statements for the proposed concourse.

The statements were transferred into a chart which is shown below in Table 2.

The focus of the statement (e.g., silence, meeting context, collective teacher efficacy), as well as the attributes revealed from the statement (e.g., relationships, insecurity, retribution, burnout, frustration, empowerment, engagement, etc.), were reported.

 Table 2

 Analysis of Proposed Concourse Statements

Proposed Concourse Statements for the Q-sort	Focus of Statement: Silence/Meeting Context/ CTE (Collective teacher efficacy)	Type of Statement Wording (positive, negative, neutral)	Possible Attributes Revealed from the Statement
I remain silent during staff meetings because I do not want to hurt the feelings of others.	Meeting context - silence - CTE	positive	Relationships
Staff meeting information is relevant to me.	Meeting context - CTE	positive	Engagement
It is important for me to be at staff meetings.	Meeting context - CTE	positive	Confidence, feeling valued
My principal respects me and my ideas.	СТЕ	positive	Confidence, feeling valued
Others have faith in me at school.	СТЕ	positive	Confidence, feeling valued
I am helpful to others at school.	СТЕ	positive	Impact, relationships
I can make a difference at school.	СТЕ	positive	Impact, empowerment
I look at the agenda before the staff meeting so that I know what we will be discussing.	Meeting context	positive	Agenda, confidence, engagement
I think that having informal conversation time is important during staff meetings.	Meeting context - CTE	positive	Relationships, engagement
I prefer one-on-one or small group discussions to whole group discussions during staff meetings.	Meeting context - CTE	positive	Agenda. engagement, relationships, confidence

I am silent during meetings so that I can listen to other people's ideas.	Meeting context - silence - CTE	positive	Relationships, engagement
I think that being silent during a staff meeting is a positive behavior.	Meeting context - silence - CTE	positive	Relationships, engagement, exhaustion
I enjoy small talk with colleagues before the meeting begins.	Meeting context - CTE	positive	Relationships
I remain silent so that the meeting ends early.	Meeting context - silence	neutral	Engagement, meaningfulness
I need time to think about issues before I contribute to discussions.	Meeting context - silence	neutral	Agenda, reflection
I remain silent unless the topic affects my own classroom.	Meeting context - silence - CTE	neutral	Impact, engagement
Most of the information during the staff meeting could have been sent in an email.	Meeting context	neutral	Agenda, engagement
I remain silent when someone states incorrect information during a staff meeting.	Meeting context - silence	neutral	Relationships, retribution, insecurity
During staff meetings, I prefer not to talk about my work/project with others until it is perfected.	Meeting context - silence - CTE	neutral	Insecurity, relationships
I remain silent at meetings to not give away my knowledge advantage.	Meeting context - silence - CTE	negative	Retribution, frustration
I remain silent during meetings because that would mean having to do additional work.	Meeting context - silence - CTE	negative	Defensive, exhaustion/burno ut, complacency
I remain silent during staff meetings because of fear of negative consequences from speaking.	Meeting context - silence - CTE	negative	Insecurity, relationships, defensive

I remain silent so that I am not vulnerable in the face of colleagues or administrators.	Meeting context - silence - CTE	negative	Insecurity
I am silent because others are monopolizing the discussion.	Meeting context - silence - CTE	negative	Time management, frustration, disengaged
I often regret what I did not say during staff meetings.	Meeting context - silence - CTE	negative	Reflection, confidence, insecurity
I usually need time to decompress after a staff meeting.	Meeting context - CTE	negative	Burnout, exhaustion, reflection
I remain silent during meetings because I do not want to say something wrong.	Meeting context - silence - CTE	negative	Insecurity, relationships
I remain silent during meetings because I will not find a sympathetic ear.	Meeting context - silence - CTE	negative	Insecurity, relationships
I remain silent at meetings because nothing will change.	Meeting context - silence - CTE	negative	Burnout, frustration
It is difficult for me to remain silent during staff meetings.	Meeting context - silence - CTE	negative	Empowerment, confidence, opinionated
I avoid having difficult conversations during staff meetings.	Meeting context - silence - CTE	negative	Avoidance, relationships, exhaustion, engagement
Discussions during the staff meeting are often focused on complaining.	Meeting context - CTE	negative	Relationships, burnout, frustration

Since the goal was to have 30 statements for the final concourse, the researcher decided to survey an additional six education professionals about the proposed concourse items. A google survey was made that contained each concourse statement accompanied

by a five-point Likert scale. The participants were instructed to rate each statement on the five-point scale (1 = strongly disagree; 5 = strongly agree). The participants were purposefully selected based on the researcher's personal knowledge of how they tend to participate during staff meetings. To ensure anonymity, the invitation to participate, along with the google survey, was emailed to each individual separately, and the survey did not collect email addresses from the respondents.

Four of the six individuals responded to the survey within one day. The answers from the four respondents were analyzed to determine if a variety of responses were given for each statement. Since the goal was to have a concourse that represented a variety of possible responses relating to the topic of teacher silence during meetings, each question was analyzed based on the participants' responses. Out of the 32 statements, 30 of them had a variety of responses.

Twenty statements received three different ratings by the participants:

- 1. It is important for me to be at staff meetings.
- 2. I remain silent when someone states incorrect information during a staff meeting.
- 3. I remain silent so that the meeting ends early.
- 4. It is difficult for me to remain silent during staff meetings.
- 5. I often regret what I did not say during staff meetings.
- 6. I remain silent during staff meetings because of fear of negative consequences from speaking.
- 7. I prefer one-on-one or small group discussions to whole group discussions during staff meetings.

- I remain silent during staff meetings because I do not want to say something wrong.
- 9. I remain silent during staff meetings because I do not want to hurt the feelings of others.
- 10. I remain silent during staff meetings because nothing will change.
- 11. I usually need time to decompress after a staff meeting.
- 12. I enjoy small talk with colleagues before the meeting begins.
- 13. During staff meetings, I prefer not to talk about my work with others until it is perfected.
- 14. I remain silent during staff meetings because that would mean having to do additional work.
- 15. I think that having informal conversation time is important during staff meetings.
- 16. I remain silent unless the topic affects my own classroom.
- 17. I remain silent during staff meetings because I will not find a sympathetic ear.
- 18. Most of the information during the staff meeting could have been sent in an email.
- 19. I remain silent so that I am not vulnerable in the face of colleagues or administrators.
- 20. I can make a difference at school.

Five statements received two different ratings with each rating represented twice (i.e., two participants rated the statement a 5, and two rated that same statement a 4):

- 1. Staff meeting information is relevant to me.
- 2. I need time to think about issues before I contribute to discussions.
- 3. I am silent during staff meetings so that I can listen to other people's ideas.

- 4. Discussions during the staff meeting are often focused on complaining.
- 5. I remain silent during meetings to not give away my knowledge advantage.

Five statements received three of one rating (i.e., three participants rated the statement a 5, and one participant rated the same statement a 4):

- 1. My principal respects me and my ideas.
- 2. I am silent because others are monopolizing the discussion.
- 3. I am helpful to others at school.
- 4. Others have faith in me at school.
- 5. I think that being silent during a staff meeting is a positive behavior.

Two statements were rated the same by all four individuals:

- I look at the agenda before the staff meeting so that I know what we will be discussing.
 - a. All four individuals rated this statement as 5-strongly agree.
- 2. I remain silent to avoid having difficult conversations during staff meetings.
 - a. All four individuals rated this statement as 2-disagree.

Upon analysis, two statements were eliminated from the concourse:

- 1. Others have faith in me at school.
 - a. Some participants may feel uncomfortable with the word faith in this statement. In addition, this statement received the same ratings as "I am helpful to others at school" which measures a similar construct.
- 2. My principal respects me and my ideas.

a. This statement focuses on perceptions of relationships which are measured in other concourse statements. This statement did not show a diversity of ratings for either the initial sort or the survey.

This resulted in a total of 30 statements for the final concourse:

- 1. It is important for me to be at staff meetings.
- 2. I remain silent when someone states incorrect information during a staff meeting.
- 3. I remain silent so that the meeting ends early.
- 4. It is difficult for me to remain silent during staff meetings.
- 5. I often regret what I did not say during staff meetings.
- 6. I remain silent during staff meetings because of fear of negative consequences from speaking.
- 7. I prefer one-on-one or small group discussions to whole group discussions during staff meetings.
- 8. I remain silent during staff meetings because I do not want to say something wrong.
- 9. I remain silent during staff meetings because I do not want to hurt the feelings of others.
- 10. I remain silent during staff meetings because nothing will change.
- 11. I usually need time to decompress after a staff meeting.
- 12. I enjoy small talk with colleagues before the meeting begins.
- 13. During staff meetings, I prefer not to talk about my work with others until it is perfected.

- 14. I remain silent during staff meetings because that would mean having to do additional work.
- 15. I think that having informal conversation time is important during staff meetings.
- 16. I remain silent unless the topic affects my own classroom.
- 17. I remain silent during staff meetings because I will not find a sympathetic ear.
- 18. Most of the information during the staff meeting could have been sent in an email.
- 19. I remain silent so that I am not vulnerable in the face of colleagues or administrators.
- 20. I can make a difference at school.
- 21. Staff meeting information is relevant to me.
- 22. I need time to think about issues before I contribute to discussions.
- 23. I am silent during staff meetings so that I can listen to other people's ideas.
- 24. Discussions during the staff meeting are often focused on complaining.
- 25. I remain silent during meetings to not give away my knowledge advantage.
- 26. I am silent because others are monopolizing the discussion.
- 27. I am helpful to others at school.
- 28. I think that being silent during a staff meeting is a positive behavior.
- 29. I look at the agenda before the staff meeting so that I know what we will be discussing.
- 30. I remain silent to avoid having difficult conversations during staff meetings. -Based on feedback from participants, this statement was reworded to "I avoid having difficult conversations during staff meetings."

Procedure

After approval was received from the Youngstown State University Human Subjects/Institutional Review Board (IRB), invitations to participate in the study were sent via email to a purposive sampling of participants. The researcher used purposive sampling to ensure a representative sample of participants. Q-methodology requires participants who have strong viewpoints about the topic being studied (Watts & Stenner, 2012). The researchers' participant recruitment strategy was in alignment with this purpose since the participant emails contained specific reference to this topic. The information in the email, and in the study itself, reported that the activities could take 30-45 minutes to complete. If an individual was not interested in this topic, they most likely did not agree to participate in the study due to the length of time involved.

A link to the Q-sort was attached to the email invitation. The survey contained questions related to the study parameters (e.g., length of time full-time teaching, gender identification, race/ethnicity, and personal perception of their typical level of silence during staff meetings). The goal of this study was to understand the diversity of perspectives on teacher silence during staff meetings, not to make generalizations or assumptions about groups of people. Including different gender identifications, races/ethnicities, education level, and typical levels of meeting silence, as well as other demographic categories, provided a broader range of perspectives on the phenomenon of teacher silence.

This study involved no probability of harm or discomfort, and data were not personally identifiable. The Q-methodology uncovers diverse perspectives on a phenomenon in a non-threatening way since the Q-set is already generated for the

participants, and they are not asked to generate their own unique statements about teacher silence (Zabala et al., 2018). The Q-sort was administered through an online program, on an individual basis. Each participant was informed about the purpose of the study, how their personal information would be redacted, and how strict confidentiality would be maintained both during and after the study. All participant data was coded for anonymity. Information included a statement about the voluntary nature of participation in the study, and the researcher informed participants that they could stop and withdraw at any time. Participants had the option to receive a copy of the data and research results, upon request.

A computer web-based program, *Q Method Software*, was used to administer and analyze the Q-sort process. *Q Method Software* allows participants to complete the Q-sort from any location through a web-based software program. Since the program is web-based, participants do not have to download anything to their computers. The participants were sent an email that contained a link for them to click on to access the Q-sort. The link took them directly to their own personal copy of the Q-sort.

Within the Q-sort, the participants were given the prompt: "Think about the last staff meeting that you attended *in person* in your school building. For each statement, click the icon that aligns most with your view." The icons represent "strongly disagree, neutral, strongly disagree." The participants read each concourse statement and dragged it to the group that best reflected their personal perspective and views on teacher silence during staff meetings.

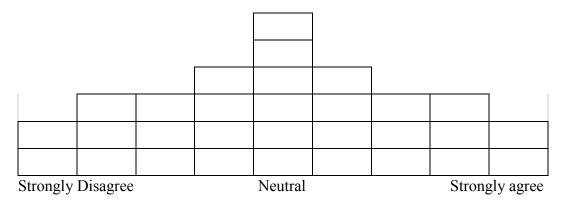
Next, the final sorting took place. The participant took the pre-sorted concourse statements, and dragged those concourse statements to the location on the distribution

framework that most closely reflected their views. They arranged them in order of *strongly disagree* to *strongly agree*. A forced distribution procedure was used when participants rank ordered the statements. This forced distribution results in all concourse statements being placed on the distribution framework.

Figure 3 below shows the distribution framework for the Q-sort based on a 30-item concourse.

Figure 3

Distribution Framework for 30-Item Concourse



Multimedia elements and prompts guided participants through the Q-sort process.

There was not a time limit within which the Q-sort had to be completed.

Since the *Q Method Software* automatically recorded the answers of each participant, there was no chance of human error when recording the data from the Q-sorts. The data from each participant was able to be analyzed immediately upon completion. Variability in how the statements were ordered by the participants was analyzed statistically to reveal dominant patterns of beliefs (Durning & Osuna, 1996). The analysis also identified patterns in responses to describe how teachers with both

similar and different beliefs perceived silence during staff meetings (Durning & Osuna, 1996).

An online survey was included as a part of the *Q Method Software* process. The survey asked for demographic information (e.g., years teaching full-time, gender identification, highest degree obtained, race/ethnicity), their rating of their own level of silence during staff meetings, and their perceptions of their principal's leadership style. Additionally, open-ended questions were posed that were related to participants' views of silence, feelings about their own levels of silence during staff meetings, and leadership behaviors and meeting contexts that they think impact their silence behaviors during staff meetings.

Participants who completed the web-based Q-sort were given the opportunity to be entered into a drawing for a \$50 Visa gift card. Two gift cards were awarded. To sign up for the drawing, the interested participants clicked on a link at the end of the study. This link took them to a Survey Monkey form that they could fill out with their name and contact information (i.e., phone number or email). To ensure anonymity, the Survey Monkey form was not linked in any way with the completed Q-sort or survey items. The gift card drawing was conducted by assigning a number to each participant. An online random number generator was used to select two of the participants.

Data Analysis

The Q-sort was analyzed according to guidelines set by Watts and Stenner (2012). The data was analyzed for themes and subgroups through a holistic focus on the data. The focus of the analysis was on the whole viewpoints, not the individual viewpoints of each participant (Watts & Stenner, 2012). The *Q Method Software* allowed the researcher to

determine the number of desired factors, the rotation method (orthogonal, oblique, or Varimax), the correlation method (Pearson, Kendall, or Spearman), and principal component analysis (PCA). The *Q Method Software* generated the following reports that could be used for data analysis:

- rank statement totals
- normalized scores for factors
- descending array of differences for factors
- factor characteristics
- statement factor scores
- standard error of differences
- correlation between factor Z-scores
- distinguishing statements
- consensus statements (Q Method Software, 2021)

Demographic information about each participant was collected as a part of the *Q Method Software* procedure.

Short answer responses from the survey were analyzed through the use of factor analysis, to identify main themes related to participants' subjective views on silence during staff meetings. Additionally, the researcher analyzed reported leadership behaviors and meeting contexts that were impactful to participants' silence behaviors.

Summary

Q-methodology was chosen to investigate the phenomenon of teacher silence during staff meetings because the focus of the research was to understand the diversity of perspectives, feelings, and opinions of individuals (Watts & Stenner, 2012). Q-

methodology utilizes both qualitative and quantitative research techniques to identify patterns among the views and perspectives of the participants (Watts & Stenner, 2012). Q-methodology uses factor analysis to discover how the views of individuals are correlated and explores personality characteristics that impact or influence behavior (Watts & Stenner, 2012). Q-methodology does not lead to generalizations to other populations, but it can help guide program evaluation and measure changes in perspectives for the sample population (Harris et al., 2021).

Q-methodology relies on a concourse of statements that have been identified from an extensive literature review (Zabala et al., 2018). The initial 60-item concourse was reduced to the most salient statements that reflected current research on employee silence, teacher silence, meeting science, leadership behaviors, and collective teacher efficacy. In addition, a pilot study and a survey of current educators was conducted to reduce the concourse to 30 statements.

This study added to the knowledge and understanding of how teacher silence presents in the context of school staff meetings, the influence of administrators' and colleagues' behaviors on teacher silence, and how silence during staff meetings is perceived by teachers. A better understanding of the phenomenon of teacher silence, from the teachers' point of view, helped to fill in the existing gap in the literature. This information may provide information that allows principals to conduct and facilitate staff meetings in a way that is beneficial, supportive, and equitable for all educators involved.

The researcher utilized the *Q Method Software* web-based program to administer the Q-sort to 30-40 current educators with varying backgrounds and demographics. The

Q Method Software was used to compile and analyze the data to identify common factors and subfactors among the participants.

Chapter 4

Results

The current investigation examined the perspectives of teachers on silence during staff meetings. Quantitative and qualitative data were synthesized to provide meaning and understanding into the different viewpoints about silence from the perspective of full-time public-school teachers. Results of the analysis were used to respond to the following initial research questions that framed the study:

- 1) What are teachers' reasons for being silent during staff meetings?
 - a) Are they satisfied with their level of silence during staff meetings?
 - b) Do teachers come to the staff meeting planning on being silent?
- 2) What do teachers indicate reinforces silence behaviors during staff meetings?
 - a) Does the format of the staff meeting contribute to silence?
 - b) Does the behavior or leadership characteristics of the principal contribute to their silence?
- 3) Do teachers report any benefits or drawbacks of being silent during staff meetings?

Participants

Participants were asked to provide their basic descriptive information. Thirty-eight participants provided demographic information and completed the survey questions.

One participant (JFST) did not provide demographic information or complete the survey questions.

Twenty-three participants were female (61%), and 15 participants were male (39%). Twenty-one participants taught in suburban school districts (55%); 15 taught in urban districts (39%); and two taught in rural districts (5%). Thirty-seven participants

identified as White or Caucasian; one participant identified as Black or African-American. Two participants had doctoral degrees (5%); 30 had master's degrees (79%); and six had bachelor's degrees (16%). Thirty-four participants were members of a teachers' union (89%); three were not members of a teachers' union (8%); and one preferred not to answer (3%).

 Table 3

 Crosstabulation of Teacher Age and Years Working in Their Current School Building

Teacher Age	Years Working in Current School Building						
	1-4	5-10	10-15	15-20	20+		
20-29 years old	1	1	0	0	0		
30-39 years old	3	5	4	0	0		
40-49 years old	0	2	3	1	7		
50-59 years old	0	3	2	0	4		
60+ years old	1	0	0	0	7		

Table 3 above reflects the crosstabulation of teacher age and years working in their current school building. This information is important because it provides a more comprehensive understanding of the participants. Seven participants likely taught in only one school building during their careers (i.e., aged 40-49 and taught 20+ years at their current building). This information demonstrates that the participants varied in their professional experiences, their familiarity with the school culture, and their ages.

Related to their own silence during staff meetings, 21 participants reported that they are usually silent during staff meetings (55%). Sixteen participants reported that they

are sometimes silent during staff meetings (42%). One participant reported that they are rarely silent during staff meetings (3%).

Refer to Appendix B for the descriptive data and factor loading information for each participant. The raw data is available at the following link: https://bit.ly/3x0mSGV

Q-Sort Results

Correlation Matrix

Appendix C provides the correlation matrix analysis between the 39 Q-sorts. Correlations are reported on a scale from ± 1.00 to ± 1.00 . The relative strength of the correlation increases as the numbers move towards ± 1.00 . A correlation of 0 reflects no shared information. Positive correlations reflect similarities between the participants, and negative correlations reflect differences between the participants.

The results revealed many moderate-to-high correlations between participants, as indicated by values of .39 or higher ($r \ge .39$). Correlations found to be statistically significant are shown in bold print. The results also revealed low correlations, or disparities and disagreements, between responses (r < .39). A result of 1.0 indicates the perfect correlation of the participant with his own response. To account for variability and look for shared meaning in the data, continued analyses involved identification and removal of common variance from the results. Principal component analysis (PCA) was the analysis method used to extract factors since that method allows for the summarization of large data tables into a smaller set of data that can be more easily analyzed (Jolliffe & Cadima, 2016).

The 39 Q-sorts were intercorrelated and factor analyzed through extraction of three centroid factors and a Varimax rotation of those three factors. Auto-flagging was set to p < 0.05, and a majority of common variance was required. Factor analysis determines which individuals can be grouped together due to demonstrating similar perspectives on a particular issue (Watts & Stenner, 2012).

Initially, an analysis was run using a six-factor model. This determination was based on Brinsfield's (2013) identification of six types of silence. A six-factor extraction resulted in 55% of the variance captured, with 12 participants not loading on a factor. A five-factor extraction resulted in 51% of the variance captured, with 13 participants not loading on a factor. A four-factor extraction resulted in 45% of the variance captured, with 10 participants not loading on a factor. A three-factor extraction resulted in 41.4% of the variance captured, with 10 participants not loading on a factor. The researchers looked at the consensus statements for both the four-factor extraction and the three-factor extraction. A comparison revealed that the four-factor extraction did not result in any consensus statements for two of the factors, while the three-factor extraction resulted in consensus statements for all three of the factors. As a result, the researchers decided to use the three-factor model.

Table 4 below reveals eigenvalues ranging from the highest level of 8.9713 to the lowest level of 2.4655. The analysis indicates that 41.4% of the variance responses could be identified in three factors.

Table 4 *Eigenvalues*

Factors	1	2	3
Eigenvalues	8.97	4.72	2.47
% Explained Variance	23	12	6
Cumulative % Explained	23	35	41

Three factors were extracted and rotated. This represented 41.4% of the total study variance. These three factors represent people of similar perspectives. Three factors exceeded the acceptable 1.0 cutoff with eigenvalues of 8.97, 4.72, and 2.47. Therefore, a three-factor model was considered to be the most efficient and parsimonious model in explaining the participants' viewpoints.

Varimax Rotation. Varimax rotation is a statistical method that uses an algorithm which clarifies the relationships among factors by minimizing the variance (Watts & Stenner, 2012). Varimax rotation results in identifying how well the responses of each participant align with others who have similar responses (Watts & Stenner, 2012).

Table 5 below illustrates the extent to which each Q-sort was associated with each participant following rotation. In this three-factor model, X indicates the factor each participant connects with the most.

 Table 5

 Factor Matrix with an X Indicating a Defining Sort

	Get the Party	I Don't Care	Don't Stop
	Started	Anymore	Believin'
Participant	Factor 1	Factor 2	Factor 3
19LO	0.11	0.36	0.71X
1BFX	0.35	0.32	0.11
2531	-0.12	0.27	0.28
2NVV	-0.09	0.47X	0.14
2QK3	-0.04	0.15	0.51X
3BHM	0.25	0.76X	0.15
3VMI	0.46	0.52X	-0.08
6BOC	0.57X	-0.19	0.24
6FGU	-0.06	0.59X	0.31
88DK	0.19	0.02	0.24
AA5K	0.64X	-0.07	0.23
BVQJ	0.28	0.7X	0.47
CAB4	0.43	-0.22	0.4
CU18	0.8X	0.22	-0.24
D4NX	0.27	0.2	0.44X
D6P9	0.46	-0.46	0.08
E3HP	0.36	0.28	0.54X
EIT8	0.34	0.03	0.3
ERPR	0.15	0.29	0.56X
FVD0	0.21	0.34	0.04
G7YN	-0.09	-0.25	-0.36X
GN7R	0.42X	-0.07	0.29
HB9X	-0.06	-0.08	0.32
JES7	-0.15	0.03	0.35
JF5T	0.44X	0.09	0.32
JK3A	0.2	0.67X	0.36
JV7O	-0.14	0.28	0.01
KBMU	0.59X	0	0
OKVI	0.7X	0.32	0.04
P1X3	0.66X	0.37	-0.15
P644	0.59X	-0.15	-0.07
R1WZ	0.78X	0.16	-0.06
R63A	0.54X	-0.23	0.48
T2NC	0.62X	0.31	0.1
T75W	0.77X	0.3	0.05

THE SOUND OF SILENCE

TBFZ	-0.19	0.33	0.54X
UUM7	0.77X	-0.17	0.01
WGLI	0.72X	0.11	-0.07
YAG6	0.07	0.63X	0.06
% Explained			
Variance	23	12	6

Note. X indicates significant factor loading.

Twenty-nine of the 39 Q-sorts loaded significantly on one of the three factors. Together, Factors 1, 2, and 3 explain 41.4% of the study variance. Ten participants did not load significantly on any factor with other participants in this study. This indicates that those ten participants did not fit with the three main factors that were extracted. For this investigation: Factor 1 will be referred to as *Get the Party Started*; Factor 2 will be referred to as *I Don't Care Anymore*; and Factor 3 will be referred to as *Don't Stop Believin'*.

Q-sort Statements with Corresponding Ranks

To determine how much each factor agreed with each statement, Z-scores were examined. Z-scores are described as weighted average scores. The weighted scores reveal the level of agreement and disagreement within each identified factor or viewpoint.

Table 6 provides information relating to statements that held the highest levels of agreement (positive z scores) and disagreement (negative z scores) for *Get the Party Started*. Only statements with Z-scores greater than 1.00 were included in the table.

 Table 6

 Ranked Scores for Get the Party Started, Z-scores Greater Than 1.00

No.	Statement	Z-Score
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.68
13	During staff meetings, I prefer not to talk about my work with others until it is perfected.	-1.60
25	I remain silent during meetings to not give away my knowledge	
	advantage.	-1.41
22	I need time to think about issues before I contribute to discussions.	1.17
1	It is important for me to be at staff meetings.	1.30
21	Staff meeting information is relevant to me.	1.33
29	I look at the agenda before the staff meeting so that I know what we will be discussing.	1.48
20	I can make a difference at school.	1.59
27	I am helpful to others at school.	1.81

Complete results for the information listed in Table 6 are provided in Appendix D. Tables 7 and 8 display similar results for *I Don't Care Anymore* and *Don't Stop Believin'* and are also included in Appendix D. Table 7 provides ranked Z-scores for the *I Don't Care Anymore* group. Table 8 provides ranked Z-scores for the *Don't Stop Believin'* group. Appendix E also includes comparisons between the three factors.

Table 7

Ranked scores for I Don't Care Anymore, Z-scores Greater Than 1.00

No.	Statement	Z-score
4	It is difficult for me to remain silent during staff meetings.	-1.68
5	I often regret what I did not say during staff meetings.	-1.54
6	I remain silent during staff meetings because of fear of negative consequences from speaking.	-1.31
11	I usually need time to decompress after a staff meeting.	-1.24
1	It is important for me to be at staff meetings.	-1.16
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.02
12	I enjoy small talk with colleagues before the meeting begins.	1.01
24	Discussions during the staff meeting are often focused on complaining.	1.03
10	I remain silent during staff meetings because nothing will change.	1.05
14	I remain silent during staff meetings because that would mean having to do additional work.	1.15
18	Most of the information during the staff meeting could have been sent in an email.	1.61
3	I remain silent so that the meeting ends early.	2.01

Table 8

Ranked scores for Don't Stop Believin', Z-scores Greater Than 1.00

No.	Statement	Z-Score
25	I remain silent during meetings to not give away my knowledge advantage.	-1.76
4	It is difficult for me to remain silent during staff meetings.	-1.42
1	It is important for me to be at staff meetings.	-1.40
28	I think that being silent during a staff meeting is a positive behavior.	-1.24
11	I usually need time to decompress after a staff meeting.	-1.23
13	During staff meetings, I prefer not to talk about my work with others until it is perfected.	-1.12
21	Staff meeting information is relevant to me.	-1.02
29	I look at the agenda before the staff meeting so that I know what we will be discussing.	1.15
3	I remain silent so that the meeting ends early.	1.19
16	I remain silent unless the topic affects my own classroom.	1.20
10	I remain silent during staff meetings because nothing will change.	1.29
27	I am helpful to others at school.	1.31
26	I am silent because others are monopolizing the discussion.	1.38
18	Most of the information during the staff meeting could have been sent in an email.	1.80

Factor Arrays

Because Q-methodology is intended to look for viewpoints on a subject, a factor array shows a visual depiction of that factor's collective viewpoint. The factor array does not represent an individual's placement of the statements, but it reflects the collective

viewpoint. Each aggregate factor array is the model sort that best estimates the perceptions of the individuals who were in each factor. Figures 4, 5, and 6 provide arrays for each of the three model factors.

Figure 4 Model Sort for Teachers Who Loaded Significantly on Factor 1, Get the Party Started

					.			
				I remain silent				
				during staff				
				meetings because				
				that would mean				
				having to do				
				additional work.				
				Discussions during				
				the staff meetings				
				are often focused				
				on complaining.				
			I remain silent					
			during staff	I avoid having	Most of the			
			meetings because I	difficult	information during			
			do not want to hurt	conversations	the staff meeting			
			the feelings of	during staff	could have been			
			others.	meetings.	sent in an email.			
	I remain silent	I remain silent						
	during meetings to	when someone			I am silent because	I enjoy small talk		
	not give away my	states incorrect	I remain silent so	I usually need time	others are	with colleagues	It is important for	
	knowledge	information during	that the meeting	to decompress after	monopolizing the	before the meeting	me to be at staff	
	advantage.	a staff meeting.	ends early.	a staff meeting.	discussion.	begins.	meetings.	
	I remain silent					I prefer one-on-		
	during staff	I remain silent	I remain silent so		I think that having	one or small group		
I remain silent during	meetings because	during staff	that I am not	I think that being	informal	discussions to		
staff meetings because	of fear of negative	meetings because	vulnerable in the	silent during a staff	conversation time	whole group	Staff meeting	I can make a
I will not find a	consequences from	nothing will	face of colleagues	meeting is a	is important during	discussions during	information is	difference at
sympathetic ear.	speaking.	change.	or administrators.	positive behavior.	staff meetings.	staff meetings.	relevant to me.	school.
							I look at the	
During staff meetings,		I remain silent			I am silent during		agenda before the	
I prefer not to talk	I often regret what	during staff	It is difficult for	I remain silent	staff meetings so	I need time to	staff meeting so	
about my work with	I did not say	meetings because I	me to remain silent	unless the topic	that I can listen to	think about issues	that I know what	
others until it is	during staff	do not want to say	during staff	affects my own	other people's	before I contribute	we will be	I am helpful to
perfected.	meetings.	something wrong.	meetings.	classroom.	ideas.	to discussions.	discussing.	others at school.
-4	-3	-2	-1	0	+1	+2	+3	+4
Strongly Disagree				Neutral				Strongly Agree

Figure 5

Model Sort for Teachers Who Loaded Significantly on Factor 2, I Don't Care Anymore

				r	1			
				Staff meeting				
				information is				
				relevant to me.				
				I am silent during				
				staff meetings so				
				that I can listen to				
				other people's				
				ideas.				
				rucus.	I look at the	1		
			I remain silent so	I avoid having	agenda before the			
			that I am not	difficult	staff meeting so			
			vulnerable in the	conversations	that I know what			
			face of colleagues	during staff	we will be			
			or administrators.	meetings.	discussing.			
	I remain silent		I remain silent]
	during staff	I remain silent	during staff	I think that having			Discussions	
	meetings because	during staff	meetings because	informal	I need time to	I am silent	during the staff	
	of fear of negative	meetings because	I do not want to	conversation time	think about issues	because others are	meetings are often	
	consequences	I will not find a	hurt the feelings	is important during	before I contribute	monopolizing the	focused on	
	from speaking.	sympathetic ear.	of others.	staff meetings.	to discussions.	discussion.	complaining.	
		During staff	I remain silent			I prefer one-on-		
		meetings, I prefer	when someone			one or small group	I remain silent	Most of the
	I usually need	not to talk about	states incorrect	I remain silent	I think that being	discussions to	during staff	information during
It is difficult for me to	time to	my work with	information	unless the topic	silent during a	whole group	meetings because	the staff meeting
remain silent during	decompress after a	others until it is	during a staff	affects my own	staff meeting is a	discussions during	nothing will	could have been
staff meetings.	staff meeting.	perfected.	meeting.	classroom.	positive behavior.	staff meetings.	change.	sent in an email.
			I remain silent				I remain silent	
		I remain silent	during staff				during staff	
	.	during meetings to	meetings because			I enjoy small talk	meetings because	
I often regret what I	It is important for	not give away my	I do not want to	I can make a	T 1 1 C 1	with colleagues	that would mean	I remain silent so
did not say during staff	me to be at staff	knowledge	say something	difference at	I am helpful to	before the meeting	having to do	that the meeting
meetings.	meetings.	advantage.	wrong.	school.	others at school.	begins.	additional work.	ends early.
-4	-3	-2	-1	0	+1	+2	+3	+4
Strongly Disagree				Neutral				Strongly Agree

Figure 6

Model Sort for Teachers Who Loaded Significantly on Factor 3, Don't Stop Believin'

				I am silent during staff meetings so that I can listen to other people's ideas.				
				I remain silent during staff meetings because I will not find a sympathetic ear.				
				I remain silent during staff				
			I often regret what I did not say during staff meetings.	meetings because I do not want to hurt the feelings of others.	I need time to think about issues before I contribute to discussions.			
	It is important for me to be at staff meetings.	During staff meetings, I prefer not to talk about my work with others until it is perfected.	I remain silent so that I am not vulnerable in the face of colleagues or administrators.	I can make a difference at school.	I remain silent when someone states incorrect information during a staff meeting.	Discussions during the staff meetings are often focused on complaining.	I remain silent unless the topic affects my own classroom.	
I remain silent during meetings to not give away my knowledge advantage.	I think that being silent during a staff meeting is a positive behavior.	Staff meeting information is relevant to me.	I think that having informal conversation time is important during staff meetings.	I avoid having difficult conversations during staff meetings.	I remain silent during staff meetings because of fear of negative consequences from speaking.	I look at the agenda before the staff meeting so that I know what we will be discussing.	I remain silent during staff meetings because nothing will change.	I am silent because others are monopolizing the discussion.
It is difficult for me to remain silent during staff meetings.	I usually need time to decompress after a staff meeting.	I remain silent during staff meetings because that would mean having to do additional work.	I remain silent during staff meetings because I do not want to say something wrong.	I prefer one-on-one or small group discussions to whole group discussions during staff meetings.	I enjoy small talk with colleagues before the meeting begins.	I remain silent so that the meeting ends early.	I am helpful to others at school.	Most of the information during the staff meeting could have been sent in an email.
-4 Strongly Disagree	-3	-2	-1	0 Neutral	+1	+2	+3	+4 Strongly Agree

Factor Interpretation: Identifying Similarities and Differences in Viewpoints. The factor arrays, demographics, and other information gathered during the post-sort follow-up questions lead to the interpretation of viewpoints. In Table 9 below, a correlation analysis probing the relationships between the factors shows a moderately high correlation between *I Don't Care Anymore* and *Don't Stop Believin'*. *Get the Party Started* shows a low correlation with *I Don't Care Anymore* and *Don't Stop Believin'*, therefore, it holds a distinctive viewpoint.

Table 9Correlation Between Factor Scores

Factors	1	2	3
1			
2	0.36		
3	0.22	0.65	

As indicated in Table 10, 15 out of 39 participants (38%) were included in Factor 1, *Get the Party Started*. Seven of the 39 participants (18%) were included in Factor 2, *I Don't Care Anymore*. Seven of the 39 participants (18%) were included in Factor 3, *Don't Stop Believin'*. The factor characteristics in Table 10 contain the reliability (under the heading Composite Reliability) and error messages (under the heading Standard Error of Factor Z-Scores) for each of the factor arrays. Factors are essentially weighted averages that indicate close alignment among participants. This study had 29 people who produced results with good reliability and standard error measurements, and they were able to be loaded onto one of the identified factors.

Table 10Factor Characteristics

Factor Characteristics		Factors	
	1	2	3
Number of Defining Variables	15	7	7
Average Reliability Coefficient	0.8	0.8	0.8
Composite Reliability	0.984	0.966	0.966
Standard Error of Factor Z-Scores	0.128	0.186	0.186

Table 11 presents the consensus statements between the three identified perspectives. These consensus statements were selected by each group in similar ways. All three perspectives agreed with item 12, disagreed with item 19, and were neutral for item 30.

Table 11

Consensus Statements Between Get the Party Started, I Don't Care Anymore, and Don't Stop Believin'

No.	Statement
12	I enjoy small talk with colleagues before the meeting begins.
19	I remain silent so that I am not vulnerable in the face of colleagues or administrators.
30	I avoid having difficult conversations during staff meetings.

Analysis of Factors: Understanding the Meaning of Viewpoints

This section presents a description of each factor with a synopsis and demographic details of participants who loaded significantly on the factor, including a list

of distinguishing statements for each factor. The distinguished statements help to define the key viewpoint for each factor and to ascertain common and differing viewpoints between factors. Tables 12, 13, and 14 identify statements that each factor ranked higher or lower when compared to the other two factors. A difference at the p < 0.01 level is represented with an asterisk. For example, Table 12 demonstrates that Factor 1 ranked statements 1, 20, 21, 22, 27, and 29 significantly higher, and ranked statements 13 and 17 significantly lower than the other factors.

Factor 1: Get the Party Started

Making my connection as I enter the room Everybody's chillin' as I set up the groove... I'm coming up so you better **get this party started** -Pink (2001)

 Table 12

 Distinguishing Statements for Factor 1, Get the Party Started

		Factors					
		1		2		3	3
		Z-		Z-		Z-	
No.	Statement	score	Rank	score	Rank	score	Rank
27	I am helpful to others at school.	1.81*	4	0.81	1	1.31	3
20	I can make a difference at school.	1.59*	4	0.45	0	0.02	0
21	Staff meeting information is relevant to me.	1.33*	3	-0.33	0	-1.02	-2
1	It is important for me to be at staff meetings.	1.30*	3	-1.16	-3	-1.40	-3
22	I need time to think about issues before I contribute to discussions.	1.17*	2	0.61	1	0.22	1
23	I am silent during staff meetings so that I can listen to other people's ideas.	0.93	1	-0.26	0	-0.20	0
15	I think that having informal conversation time is important during staff meetings.	0.78	1	-0.05	0	-0.27	-1
26	I am silent because others are monopolizing the discussion.	0.15	1	0.89	2	1.38	4
18	Most of the information during the staff meeting could have been sent in an email.	0.08	1	1.61	4	1.80	4
28	I think that being silent during a staff meeting is a positive behavior.	-0.09	0	0.81	1	-1.24	-3
11	I usually need time to decompress after a staff meeting.	-0.24	0	-1.24	-3	-1.23	-3

24	Discussions during the staff meeting are often focused on complaining.	-0.35	0	1.03	3	0.99	2
14	I remain silent during staff meetings because that would mean having to do additional work.	-0.37	0	1.15	3	-0.99	-2
4	It is difficult for me to remain silent during staff meetings.	-0.42	-1	-1.68	-4	-1.42	-4
3	I remain silent so that the meeting ends early.	-0.57	-1	2.01	4	1.19	2
10	I remain silent during staff meetings because nothing will change.	-0.77	-2	1.05	3	1.29	3
13	During staff meetings, I prefer not to talk about my work with others until it is perfected.	-1.60*	-4	-0.92	-2	-1.12	-2
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.68*	-4	-1.02	-2	-0.14	0

Get the Party Started had 15 statistically loading participants, and it explained 23% of the study variance. It had an eigenvalue of 8.97. One participant did not complete the demographic information survey items; therefore, the demographic information is based on 14 participants. The participants ranged in age from 30-60+ years old, with 11 of the participants' ages being 40-60+ years old (79%). This factor had the highest percentage of female teachers (79%). This factor also had the highest overall levels of education: two with doctoral degrees, 11 with master's degrees, and one with a bachelor's degree. All ranges of teaching experience were represented in this group, with the majority being teachers with 5-15 years teaching in their current school building (57%). Seven taught in urban school districts, five in suburban districts, and two in rural

districts. Thirteen participants identified themselves as White or Caucasian, and one participant identified herself as Black or African American.

Five teachers reported that they are usually silent during staff meetings. Eight teachers reported that they are sometimes silent. One teacher reported that he is rarely silent. Ten teachers were satisfied with how much they typically spoke during a staff meeting. Four teachers were not satisfied and wished that they spoke more often during staff meetings. Twelve teachers were members of the teachers' union, and two were not members. The leadership styles of their building principals were reported as mostly directive (n = 7), mostly collaborative (n = 6), and other (n = 1).

A synopsis of their viewpoints follows. Rankings of relevant statements are provided. For example, (27:+4) indicates that statement 27 was ranked +4 by that factor in the Q-sort. Some comments that clarified and supported the interpretations made by participants are cited and indicated in italics.

The *Get the Party Started's* General Viewpoint. *Get the Party Started* conveys an overall positive attitude about staff meetings. *Get the Party Started* believes it is important for them to be at staff meetings (1:+3), view staff meeting information as relevant (21:+3), and look at the agenda prior to the meeting (29:+3). AA5K described staff meetings as positive experiences because an agenda is provided, and they are "to the point." R1WZ agreed that silence during a staff meeting keeps "the focus on target with the agenda." CU18 commented that staff meetings at her school are "collaborative, lively, productive" and "are much more interactive than they were a few years ago."

Even though *Get the Party Started* conveyed that it was important for them to be at staff meetings (1:+3), five participants described their staff meetings as the following:

"long, boring, not worth the time" (T75W); "useless" (T2NC); and "compliant, boring" (GN7R). 6BOC wrote, "...at times, they can be monotonous. Things that need to be covered in an email would suffice. Small meetings are perfect." R63A stated that when people choose to remain silent, there are "minimal personal gains from meetings." One participant recommended:

...maybe have a meeting in the morning instead of after school to cater to us morning people. The after-school meetings cater to the extroverts who are still energized at the end of the day. Also, understand that some of us, especially the introverts, while we appreciate the effort at creating engagement, are just trying to make it to the parking lot to go home. It's nothing personal, but we give all of our energy to our students and really don't have that additional hour to be 'doing' things. (T75W)

Although they find value in the idea of staff meetings, they report that the implementation of staff meetings in their buildings could be improved.

Get the Party Started views themselves as helpful (27:+4) and feel that they can make a difference at school (20:+4). "Some benefits to being silent during staff meetings is that I am able to gather different insights from my colleagues. I can hear perspectives from different grade levels and gather a better understanding of whatever topic is being discussed" (WGLI).

They believe in the possibility for change (10:-2). WGLI stated, "some drawbacks of being silent during a staff meeting is that your opinion and expertise are not shared for the collective good of the group. Relevant information might be missed if someone is not

willing to speak their voice." GN7R agrees that when people are silent, "there is no changes that are made. They listen but nothing happens."

They share knowledge and ideas with others (25:-3) and are willing to discuss their work with colleagues, even if it is not perfected (13:-4). They have professional relationships with colleagues (17:-4) and value collaboration, as well as sharing their thoughts and opinions (5:-3). WGLI commented, "I am more of an active participant during our small group discussions. I am not afraid to comment and share my thoughts." OKVI wrote, "[when I am silent,] I can listen to other teachers' perspectives and ideas and take them back to my own classroom when relevant." GN7R stated that a drawback of being silent during staff meetings is "the feeling I get from not speaking." *Get the Party Started* wants staff meetings to be characterized as a place for focused, relevant discussions and professional problem solving (13:-4, 21:+3, 29:+3).

If someone states incorrect information during the staff meeting, they will not usually remain silent (2:-2). "Silence can keep one from asking clarifying questions and better understand what is being communicated," wrote T75W. They do not fear negative consequences from speaking (6:-3). When they speak during a staff meeting, they receive empathy and validation from others (17:-4). UUM7 stated, "I do think it is nice to have a little bit of time for small talk because anymore, we never have the opportunity to meet and just talk--so being a little relaxed in the beginning can be nice to be able to reconnect with colleagues."

Get the Party Started have a mostly positive view of their principal. P644 reported that their principal is "a perfect fit. Extremely supportive. Listens well. Not afraid to confront problems or problem people. Patriotic." OKVI wrote, "our principal is

kind, passionate and respectful. He takes an interest in the staff and listens with concern to problems as well as developing and brainstorming solutions." "Team player, listens to staff, hardworking," stated 6BOC. R63A wrote, "normal, realistic, accommodating." Some participants used both positive and negative descriptions: "assertive, opinionated, naïve, idealistic" (T75W); "favoritism, collaborative, intimidating" (KBMU); "fair, stressed, temperamental, energetic" (T2NC). and "fair, collaborative, stressed" (CU18). Only one participant had a mostly negative description, writing that their principal was "supportive on the surface, overwhelmed at times, favoritism of members."

Get the Party Started have an ambivalent view on silence during staff meetings (28:0). Teacher silence is "so many things...teacher silence can be pure EXHAUSTION, it can be overload, it can be fear," wrote AA5K. CU18 commented that teacher silence can lead to "being seen as not engaged." On the other hand, R1WZ stated that teacher silence is "think time." UUM7 commented that teacher silence is "appropriate at times but at other times can lead to apathy and a disconnect." P1X3 called teacher silence "a learned behavior." P644 joked, "When I'm silent, I can usually hear better, twice as many openings in operation."

Factor 2: I Don't Care Anymore

Let me by
I have better things to do with my time
I don't care anymore
-Phil Collins (1982)

 Table 13

 Distinguishing Statements for Factor 2, I Don't Care Anymore

		Factor					
		1		2		3	3
		Z-		Z-		Z-	
No.	Statement	score	Rank	score	Rank	score	Rank
3	I remain silent so that the meeting ends early.	-0.57	-1	2.01*	4	1.19	2
14	I remain silent during staff meetings because that would mean having to do additional work.	-0.37	0	1.15*	3	-0.99	-2
28	I think that being silent during a staff meeting is a positive behavior.	-0.09	0	0.81	1	-1.24	-3
29	I look at the agenda before the staff meeting so that I know what we will be discussing.	1.48	3	0.53	1	1.15	2
21	Staff meeting information is relevant to me.	1.33	3	-0.33	0	-1.02	-2
25	I remain silent during meetings to not give away my knowledge advantage.	-1.41	-3	-0.78	-2	-1.76	-4
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.68	-4	-1.02*	-2	-0.14	0
5	I often regret what I did not say during staff meetings.	-0.93	-3	-1.54*	-4	-0.88	-1

I Don't Care Anymore had seven statistically loading participants, and it explained 12% of the study variance. It had an eigenvalue of 4.7207. The participants ranged in age from 30-49 years old; no individuals were over the age of 50 or under the age of 29. Females comprised 43% of the participants; males represented 57% of the

participants. All individuals had master's degrees. The majority of teachers reported 5-15 years of experience teaching in their current school building (71%); one teacher taught for more than 20 years in their current school building; and one teacher taught for 1-4 years in their current school building. One taught in an urban school district, and six taught in suburban districts. All seven participants identified themselves as White or Caucasian.

Six teachers reported that they were usually silent during staff meetings. One teacher reported that he is sometimes silent. Six teachers were satisfied with how much they typically spoke during a staff meeting; one teacher was unsure. Six teachers were members of the teachers' union, and one was not a member. The leadership styles of their building principals were reported as mostly directive (n = 3), mostly collaborative (n = 3), and other (n = 1).

The *I Don't Care Anymore's* General Viewpoint. *I Don't Care Anymore* conveys an overall negative perception of, and experience with, staff meetings. They do not view staff meetings as a meaningful activity (1:-3, 10:+3, 18:+4, 24:+3) or as a way to change the status quo (10:+3). BVQJ writes that, "staff meetings are just meant to disseminate information and so talking during staff meetings won't change anything, it will just require everyone to stay later, or give up time to work on other things, then they would otherwise have it." Two participants characterized their staff meetings as "redundant" (JK3A, 2NVV). 6FGU writes that staff meetings are "useless, disorganized, pointless."

I Don't Care Anymore enjoys small talk with colleagues before the staff meeting begins (12:+2). They prefer one-on-one or small group discussions to whole group discussions (7:+2), but they are typically detached and disengaged during the meetings

(1:-3, 3:+4, 4:-4). BVQJ comments that it "makes it easier to do work during the meeting if you are silently sitting." They are motivated to remain silent so that they do not have additional responsibilities added to their work (14:+3) and in hopes that the staff meeting will end early (3:+4). 6FGU comments that teacher silence is "a way to end a pointless meeting sooner." Silence also "limits repetitive talk and topics" (JK3A).

I Don't Care Anymore does not see the relevancy in staff meetings (21:0) and indicates that discussions during staff meetings are often focused on complaining (24:+3). 3BHM comments that staff meetings in his school are "chaotic (staff ask way too many questions) [and] annoying (mostly because of certain staff)." Staff meetings are described as "argumentative" by YAG6. While teachers "have plenty of engagement, they often interrupt with questions" (3BHM). YAG6 reports, "you cannot talk anyway, people spend the entire time complaining." I Don't Care Anymore prefers to remain silent during staff meetings (4:-4).

They report that much of the information shared in the staff meeting could have been sent in an email (18:+4). "The worst part about it [staff meeting] is that it's clear most of the information dissemination can be done via email," commented BVQJ. BVQJ continued:

The majority of information can be provided in an email, but it seems like there is a concern as to whether or not people are reading those emails, so the staff meetings end up as the best way for administration to cover their backs.

I Don't Care Anymore are not concerned if their opinions and ideas are not shared during the staff meetings (4:-4). 2NVV acknowledged that a downside of silence during meetings is that her "opinion or thoughts are not heard." 3VMI agreed that silence results

in "less collaboration [and] no new ideas." If they decide to share their ideas, they do not typically worry about negative consequences from speaking (17:-2). 2NVV was the only participant who expressed worry about speaking. She stated that a benefit of remaining silent was so "I do not have to deal with confrontation if someone doesn't agree with me."

When asked to describe their building principals, they typically state positive attributes, including: "understanding, direct, vocal, pride in school" (JK3A), "involved, understanding of difficulties within the building, hands-on" (2NVV), "strong, disciplinarian (in a good way), tough (in a good way), respectful, stays out of our hair (we have very few staff meetings), consistent, fair" (3BHM), and "understanding, collaborative, flexible" (3VMI). So, while they do not like staff meetings, they usually view their building principals positively.

I Don't Care Anymore views silence during staff meetings as a positive behavior (3:+4, 14:+3, 28:1). Silence is primarily a positive behavior because it can lead to the meeting ending early. 3BHM comments, "efficiency and respect are the two biggest benefits in my eyes" and is "a sign of respect and professionalism." 3VMI agrees, "information gets presented in a direct manner." JK3A writes that teacher silence is "by choice."

However, YAG6 comments that teacher silence is "sad, we all should be able to talk." 3BHM agrees that silence can be detrimental because:

...sometimes something is misstated, requires clarification, or was stated in a vague/unclear way which should be addressed. Silence can send a message of

understanding and agreement, which may or may not actually be the case. Silence is golden but it can also be deceiving.

Factor 3: Don't Stop Believin'

Some will win, some will lose...

Don't stop believin'
Hold on to the feelin'
-Journey (1981)

 Table 14

 Distinguishing Statements for Factor 3, Don't Stop Believin'

		Factor						
		1		2		3	3	
		Z-		Z-		Z-		
No.	Statement	score	Rank	score	Rank	score	Rank	
16	I remain silent unless the topic affects my own classroom.	0.01	0	0.08	0	1.20*	3	
3	I remain silent so that the meeting ends early.	-0.57	-1	2.01	4	1.19*	2	
6	I remain silent during staff meetings because of fear of negative consequences from speaking.	-0.96	-3	-1.31	-3	0.42	1	
2	I remain silent when someone states incorrect information during a staff meeting.	-0.90	-2	-0.65	-1	0.33	1	
7	I prefer one-on-one or small group discussions to whole group discussions during staff meetings.	0.95	2	0.93	2	0.22	0	
9	I remain silent during staff meetings because I do not want to hurt the feelings of others.	-0.75	-1	-0.66	-1	-0.12	0	
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.68	-4	-1.02	-2	-0.14	0	
14	I remain silent during staff meetings because that would mean having to do additional work.	-0.37	0	1.15	3	-0.99	-2	
21	Staff meeting information is relevant to me.	1.33	3	-0.33	0	-1.02*	-2	
28	I think that being silent during a staff meeting is a positive behavior.	-0.09	0	0.81	1	-1.24*	-3	

Don't Stop Believin' had seven statistically loading participants, and it explained 6% of the study variance. It had an eigenvalue of 2.4655. The participants ranged in age from 20-59 years old, with four of the participants' ages being 30-39 years old (57%). Females comprised 57% of the participants; males represented 43% of the participants. This factor had five teachers with master's degrees, and two teachers with bachelor's degrees. Most of the teachers had taught for 1-15 years in their current school building (71%), and two teachers taught for 20+ years in their school building (29%). The largest group of teachers taught for 5-10 years (43%). Two taught in urban school districts, and five taught in suburban districts. All seven participants identified themselves as White or Caucasian.

Six teachers reported that they are usually silent during staff meetings. One teacher reported that he is sometimes silent. Four teachers were satisfied with how much they typically spoke during a staff meeting. Two teachers were not satisfied and wished that they spoke more often during staff meetings. One teacher was unsure. All seven teachers were members of the teachers' union. The leadership styles of their building principals were reported as mostly directive (n = 5) and mostly collaborative (n = 2). The *Don't Stop Believin's* General Viewpoint. *Don't Stop Believin'* reports that they primarily remain silent because others are monopolizing the conversation (26:+4). They are willing to share their ideas and knowledge with others during staff meetings (25:-4). They describe themselves as helpful to others (27:+3). They are willing to take on additional work (14:-2). E3HP comments:

...teachers generally have great insight to students that the administration doesn't have. Teachers have a lot to say. [However] When I don't approach a situation as

something where I may speak I am a much more passive participant in the communication and therefore do not listen as actively.

Don't Stop Believin' conveys an overall negative viewpoint of staff meetings.

19LO states, "I think that 95% of the time meetings in my building are a one-way conversation about upcoming dates. Very few teachers want to attend. They are viewed as a box that must be checked by administration and teachers alike." E3HP agrees:

...only a portion of the staff attends. Principal or another admin delivers information. Some teachers work on their laptops, are on their phones, are complaining, talking, and some are listening. Information is presented on slides that are hard to see from a distance.

Don't Stop Believin' describe their staff meetings as: "quiet, uncomfortable" (2QK3); "annoying, redundant, complaining sessions" (G7YN); and "painful, useless, unprofessionally developed" (TBFZ). They do not believe that it is important for them to attend staff meetings (1:-3). They do not think that staff meeting information is relevant to them (21:-2). "A nuisance in the eyes of many, a contractual requirement," states ERPR.

They think that most of the information during the staff meeting could have been sent in an email (18:4). 19LO states, "meetings should not be used to read over a memo that can be read individually." ERPR reflects:

I get the impression staff meetings are used to relay information - instructional improvement days are used to elicit teacher engagement. This is especially true since so many colleagues don't read emails so the 'it could have been an email' doesn't work. It sounds petty but if I was an administrator I would be tempted to

have a collaborative task then a quiz over "the email" and once you get a passing score you can leave.

They also choose to remain silent so the meeting ends early (3:+2). They remain silent unless the information affects their own classrooms (16:+3). E3HP comments, "since I feel staff meetings could be an email and sometimes not directed at my position, I add nothing at times when I could, to end the meetings as soon as possible." They are neutral about their ability to make a difference at school (20:0). They report that staff meetings focus on complaining (24:+2). 2QK3 states:

...by staying silent at staff meetings, there is less of a chance of conflict between faculty members and admin or faculty with each other. There is a trend for meetings to become hostile at times when people do speak out.

2QK3 reports that "by staying silent, one avoids the consequences of speaking out, which can be worse." They report neutral feelings about one-on-one or small group discussions as a component of staff meetings (7:0).

When asked to describe their building principal, *Don't Stop Believin'* was ambivalent. D4NX described his principal as, "helpful, disciplined, old school, teacher ally, intimidating." Three participants spoke highly of their principals. ERPR wrote that the principal was "positive, open minded, student centered, supportive, selective (she works to enforce only those requirements that she feels are truly necessary whenever possible)." Three described their principals in negative terms. TBFZ commented, "bald and easily takes offense when you want to initiate change or talk AT ALL." 19LO described her principal as "tired, disinterested, overmatched by the problems confronting us right now."

Unlike *I Don't Care Anymore, Don't Stop Believin'* views silence during staff meetings as a primarily negative behavior (28:-3). They do not want to remain silent, but the meeting context reinforces their silence. G7YN states that benefits of remaining silent during staff meetings are "slim to none. You need to make your point." 2QK3 comments, "by staying silent in staff meetings, there are a lot of perspectives that are never discussed, which can have negative consequences for students and staff." D4NX stated, "legitimate concerns go unnoticed [or] are not dealt with." 19LO warns

...when we are silent we give tacit approval to terrible decisions, and we do not allow the expertise of the staff to solve big issues that affect us. In our school we have an amazing opportunity to be trendsetters in education and try big ideas that can make teaching and learning more effective. In an ideal world, discussion at meetings can facilitate it. Currently it looks like the worst version of education; we are all passively listening and disengaged.

Combined Viewpoints

The data analysis process took participant viewpoints and categorized them into factors of like-minded groups. However, the researcher also sought viewpoints that were shared among all participants, or the consensus of the entire group. During the Q-sort, several items did not distinguish between any pair of factors. In other words, all factors in the study ranked them similarly.

Consensus Between Factor 1, Factor 2, and Factor 3

Statements were identified similarly to the three factors as reported previously. For example, (19:-1,-1,-1) indicated that statement 19 was ranked -1 by Factor 1, -1 by Factor 2, and -1 by Factor 3. Table 15 provides consensus statements.

Table 15

Consensus Statements

		Factor					
		1		2			3
		Z-		Z-		Z-	
No.	Statement	score	Rank	score	Rank	score	Rank
12	I enjoy small talk with colleagues before the meeting begins.	0.95	2	1.01	2	0.67	1
19	I remain silent so that I am not vulnerable in the face of colleagues or administrators.	-0.45	-1	-0.66	-1	-0.30	-1
30	I avoid having difficult conversations during staff meetings.	-0.27	0	-0.16	0	0.15	0

Teachers enjoyed small talk with colleagues before the staff meeting begins (12:+2,+2,+1). They were neutral with their feelings about avoiding difficult conversations during staff meetings (30:0,0,0). They slightly disagreed with the statement that they remain silent so that they are not vulnerable to colleagues or administrators (19:-1,-1,-1). These consensus statements reflect that teachers were somewhat concerned with their relationships with their colleagues and administrators, and that concern influenced their decisions about whether or not to remain silent during a staff meeting.

The Unfactored Outliers

Ten participants did not load significantly with any of the factors. This factor had an equal number of female and male teachers. The participants ranged in age from 20-60+ years old. Five of the participants' ages were 40-49 years old (50%), and 80% of the participants were 40-60+ years old. This was the group with the largest proportion of

mid- and late-career teachers (80%). This group also had the largest percentage of teachers who had taught for 20+ years in their current school building (60%). Fifty percent of teachers taught in urban districts, Fifty percent taught in suburban districts. This factor had seven teachers with a master's degree, and three teachers with a bachelor's degree. All ten participants identified themselves as White or Caucasian.

Four participants reported that they are usually silent during staff meetings, and six teachers reported that they are sometimes silent. Five participants were satisfied with how much they typically spoke during a staff meeting. Four participants were not satisfied and wished that they spoke more often during staff meetings. One participant was unsure. Nine participants were members of the teachers' union; one preferred not to answer that question. The leadership styles of their building principals were reported as mostly directive (n = 4), mostly collaborative (n = 2), and other (n = 4).

Viewpoints of the Unfactored Outliers. Three participants reported negative viewpoints of staff meetings. JES7 commented, "A waste of time as I feel nothing ever comes out of them. No follow-ups or follow through so it doesn't matter what is talked about." "Just checking a box," reported FVD0. 2531 described their staff meetings as "redundant, poorly planned, unfocused, [and] attentive to personal agenda [versus group needs]." HB9X agreed that staff meetings were "monotonous [and] unnecessary."

Two participants indicated positive views of staff meetings. D6P9 stated, "we have not had as many meetings these past two years. I miss in-person meetings." CAB4 wrote that their staff meetings were "research based." 88DK commented that staff meetings "start out with good intentions, but [have been] overrun by controlling staff members for years."

The *Unfactored Outliers* distinguished themselves from the others, in that on the open-ended questions, they noted more diverse benefits of being silent during staff meetings. Benefits noted fell into three main categories: learning/collaboration; self-protection; and meeting efficiency. The learning/collaboration responses included: "gaining new insight from colleagues" (2531); "it is respectful to be silent and listen to the speaker" (1BFX); and you "can learn less [when] talking" (EIT8).

Self-protection responses included: "no one ever knows my true feelings" (HB9X); "reading the room" (2531); and "I don't expose myself to criticism as I already have anxiety of speaking in large groups" (JES7). "You don't have to defend yourself to people who think their way is the only way or the right way. One participant shared:

You don't have to feel stressed after the meeting because it affects your teaching afterwards. You don't have to feel that you wasted your time saying anything, since most of the time the loudest people or people who are in lead positions get what they want anyway. (88DK)

Meeting efficiency responses included: "I wish not to speak unless it is helpful to something that is being discussed" (D6P9); and "so that the meeting ends more quickly" (FVD0, JV7O).

The *Unfactored Outliers* had similar viewpoints as *Get the Party Started*. Many participants from the two groups focused on the detrimental effect that silence can have on building professional capacity. "Groupthink is rarely challenged. Not speaking means the people speaking or running the meaning assume agreement" (2531). 88DK wrote, "The same people get what they want whether it's in the best interest of students or everyone involved." FDV0 agreed, stating that remaining silent "could imply you are

condoning administrative decisions." JES7 stated, "my voice is not heard." HB9X emphasized, "no one gets to know how passionate I truly am."

The *Unfactored Outliers* had varying descriptions of building principals. Seven participants used positive characterizations of their principals. "Empathetic, decision-maker" (CAB4), "involved, understanding" (D6P9), "student-oriented, flexible" (88DK), and "effective, passionate, driven, supportive" (HB9X). Three participants characterized their principals in a negative manner. "Checked out – already retired in all practicality," observed FVD0. "Non-committal" (JV7O), "assertive, impatient, disorganized, distracted" (2531), and "afraid of certain groups of people (prior principals as well)" (88DK).

Again, similar to *Get the Party Started*, the *Unfactored Outliers* had an ambivalent view of teacher silence during staff meetings. 2531 wrote that teacher silence during staff meetings is "appropriate depending on the meeting and attendees." Teacher silence is "a sign of respect," (1BFX), "sometimes necessary" (EIT8), "beneficial" (HB9X), and "wise at times" (D6P9). On the other hand, 88DK warned that teacher silence is "a sign that the culture in the building is toxic." JES7 agreed that teacher silence is "not ok and that our concerns need to be heard in an open nonjudgmental way." FVDO expressed a neutral stance, stating that teacher silence is "predictable when meetings are at the end of a long day."

Summary

This chapter presented the results of a quantitative and qualitative factor analysis that was completed following the sorting of 30 statements by 39 full-time public-school teachers from northeast Ohio and western Pennsylvania. Thirty-eight out of 39

participants completed the demographic and short answer questions on the survey; one participant only chose to complete the Q-sort. Q-Methodology was used to explore a variety of teachers' perspectives on silence during staff meetings. Twenty-nine of the 39 study participants loaded significantly into one of three distinct factors, indicating similarities of viewpoints. The three factors were *Get the Party Started, I Don't Care Anymore*, and *Don't Stop Believin'*.

Feedback from participants was analyzed and synthesized to construct the viewpoints. Factor 1, *Get the Party Started*, was comprised of teachers who have positive attitudes towards staff meetings, felt that they could make a difference in their schools, believe in the possibility for change, and are willing to share their knowledge and ideas with others. They have an ambivalent view on teacher silence during staff meetings. While they characterize themselves as *sometimes to usually* silent during staff meetings, they do not remain silent due to fear or disengagement.

Factor 2, *I Don't Care Anymore*, was comprised of teachers who have a primarily negative view of staff meetings. They enjoy small talk with colleagues prior to the start of the meeting, but during the meeting, they are typically not engaged. They do not view staff meetings as relevant or meaningful. They are not concerned if their knowledge or opinions are not shared during the meeting. They typically remain silent so that the meeting ends early. As a result, they usually view teacher silence as a positive meeting behavior because if there is less talking, the meeting will be finished sooner, and they can move on to other more important activities.

Factor 3, *Don't Stop Believin'*, was comprised of teachers who want to share their ideas and knowledge during the staff meeting, but are silenced by colleagues who

monopolize the conversations or by meeting formats that do not allow for engagement. They are neutral in their belief that they can make a difference at school. They are typically silent to keep from being criticized or vulnerable, or because they want the staff meeting to end early. They view teacher silence as a negative behavior during staff meetings, emphasizing that teacher silence adversely impacts school decision-making and problem identification.

In addition, ten participants did not load significantly on any of the three factors. Their responses reflected a variety of opinions on the topic of teacher silence during staff meetings. The *Unfactored Outliers* had the largest proportion of mid- to late-career teachers, and 80% of participants were 40-60+ years old.

Each factor varied in viewpoints, but also shared common viewpoints among the participants, thus producing noteworthy research findings that help to address initial research questions.

Chapter 5 will provide a discussion of the findings and how the findings align with existing research, limitations of the study, recommendations for future research, and a conclusion.

Chapter 5

Discussion

Summary of Findings

This study was inspired by a personal interest in figuring out how to make staff meetings more engaging to teachers and to improve equity of participation. Staff meetings are a regular part of a teacher's contract and are set aside monthly for the entire staff to get together. Since union contracts mandate this time, it would best serve the district to utilize this time effectively and impactfully. Personal observations during staff meetings, an extensive review of the extant research (i.e., peer-reviewed and general publications), blogs, websites, and informal conversations with teachers and principals reveal that most teachers are silent during staff meetings.

This study sought to investigate how teachers view the presence of silence during staff meetings. Understanding the perspectives of teachers on silence during staff meetings may assist principals with planning and facilitating staff meetings that are meaningful, relevant, inclusive, and build collective teacher efficacy and a positive school climate. Principals need to ensure that those who want to speak have the opportunity and support to do so. Principals also need to ensure that those who remain silent are satisfied with their silence and do not perceive that their silence is due to oppression or lack of opportunity.

Gaps in peer-reviewed research indicate that the vast majority of studies have taken place in the context of the business world context, not education. Context is a critical component in whether or not an individual chooses to remain silent (Brinsfield, 2013; Cain, 2012; Chou & Chang, 2020; Faure et al., 2020; Korobov, 2020; Peng & Wei,

2020). Therefore, this study helps to fill the lacunae about teacher silence in the context of staff meetings.

Research Question 1

What are teachers' reasons for being silent during staff meetings?

Brinsfield's (2013) categories of employee silence appeared to capture the viewpoints of the teachers in this study, with one exception. *Get the Party Started*'s silence was characterized primarily by relational silence. Relational silence is seen when teachers choose to remain silent to show cooperation, empathy, and respect (Brinsfield, 2013). They believe that things can change, and they use silence to listen to the perspectives and ideas of others. They view silence as time for reflection. They also acknowledge that at times silence could be due to disengagement, especially when teachers are tired at the end of the day or when the topic does not apply to them.

and disengaged silence. Ineffectual silence is seen when teachers believe that it is not worth their time and effort to speak up – nothing will change regardless of what they do or do not say. Disengaged silence is seen when teachers emotionally, cognitively, and/or behaviorally separate themselves during the staff meeting (Brinsfield, 2013). They typically do not care about the issue or topics being discussed during the staff meeting, so they choose to remain silent. They report that they disengage by avoiding and withdrawing (e.g., off task behavior, being distracted, looking for ways to avoid work, etc.) (Berry, 2020). They hope that the staff meeting will end early and without drama by staying silent.

Don't Stop Believin's silence was also characterized by ineffectual silence and disengaged silence. They do not think it is important for them to attend staff meetings, and they typically do not find the information relevant. They do not think that anything will change as a result of their input during the staff meeting, so they remain silent unless the topic specifically relates to their own classroom. Don't Stop Believin' is also silent for a reason not mentioned in Brinsfield's research – lack of opportunity. During the staff meeting, they are not given the opportunity to voice their opinions, ideas, and knowledge, so their disengagement is due to a lack of opportunity to participate. Others monopolize the discussions, or the meeting context contains conflict.

a. Are they satisfied with their level of silence during staff meetings?

Get the Party Started and I Don't Care Anymore were typically satisfied with their level of silence during meetings. Despite being satisfied with their level of silence during meetings, Get the Party Started had ambivalent views on silence, but I Don't Care Anymore reported positive views on teacher silence. Get the Party Started recognizes that there are both positive and negative aspects of being silent. They understand that silence can be used for relationship building and reflective thinking, but also are concerned that silence can indicate apathy and disengagement. I Don't Care Anymore views teacher silence as a positive behavior, but not for the same reason. They most frequently view teacher silence as positive because it leads to the meeting ending early.

Don't Stop Believin' has a negative view of teacher silence. One-third of the participants were not satisfied with their level of silence during staff meetings and wished that they spoke more often. Don't Stop Believin' comes to the staff meeting expecting to remain silent, but still hoping for the opportunity to share their ideas and knowledge.

They are often not given the opportunity to convey their knowledge and ideas, or believe that nothing will change anyways, which contributes to their negative perceptions of teacher silence.

b. Do teachers come to the staff meeting planning on being silent?

Get the Party Started come to staff meetings planning to share their thoughts, opinions, and knowledge with others. They look at the agenda prior to the meeting so that they know what will be discussed. They want to hear the perspectives of others to improve decision making and to clarify differing viewpoints. They choose their level of silence during staff meetings and are satisfied with their level of silence behaviors. The desire to remain silent in order to hear the viewpoints of others or for purposes of reflection is characteristic of this group. They are neutral in how they react after the staff meeting is finished, neither indicating nor dismissing the presence of negative feelings that required meeting recovery time.

I Don't Care Anymore comes to staff meetings planning on being silent, and they express positive feelings about silence during meetings. Since staff meetings are not viewed as personally meaningful, silence is viewed as a means to shorten the meeting and prevent off-topic conversations. Even if a topic is relevant to their classrooms, they do not have strong feelings about the need to verbally participate during the staff meeting. They sometimes look at the meeting agenda prior to the meeting. They do not report emotional reactions to the staff meeting, as demonstrated by a lack of needing time to decompress after the meeting is finished.

Don't Stop Believin' comes to staff meetings planning on being silent, but typically wishing that they were not silent. They look at the meeting agenda prior to the

meeting. They are willing to do additional work and state that it is not a reason to remain silent. They want to share their ideas and opinions with others, but they are afraid of negative consequences from speaking. They feel forced into silence by others who are monopolizing the conversation. They report that they also remain silent so that meetings end early. They have the mindset that nothing will change, so they do not persist in their efforts to speak during staff meetings. They do not internalize their lack of participation during staff meetings because they report that they do not need time to decompress after staff meetings. This indicates that they are not emotionally invested in the meeting.

Research Question 2

What do teachers indicate reinforces silence behaviors during staff meetings?

a. Does the format of the staff meeting contribute to silence?

All three groups identified importance of meeting relevancy and following group meeting norms, as factors that contributed to their silence behaviors. Teachers valued meetings that followed the agenda and prioritized staying on topic. All three groups reported that they typically need time to think about issues before they contribute to discussions.

When the meeting topics were meaningful and not a regurgitation of an email, teachers reported higher tendency for engagement and reflective silence behaviors. When the principal had control of the meeting so that individuals did not monopolize the conversation, go off topic, or create conflict, teachers were apt to report positive feelings about the staff meeting, their administrator, and their levels of silence.

Get the Party Started and I Don't Care Anymore prefer one-on-one or small group discussions to whole group discussions during staff meetings. They also enjoy small talk before the staff meeting begins. Don't Stop Believin' somewhat enjoys small talk before the meeting begins, but was neutral about one-on-one or small group discussion time during a staff meeting. This data underscores the importance of principals not using a one-size-fits-all approach to staff meeting design. While small group discussion time is motivating to some, there are other teachers who do not view that meeting component as influencing their silence behaviors.

b. Does the behavior or leadership characteristics of the principal contribute to their silence?

Interestingly, the specific leadership style of the principal did not appear to influence teacher perspectives on silence for *Get the Party Started* and *I Don't Care Anymore*. Both groups had equal number of principals with collaborative and directive leadership styles. Whether the principal was primarily collaborative or primarily directive was not reported as a primary influence on their silence levels or their satisfaction with their silence levels. The participants typically expressed satisfaction with their own levels of silence during the staff meeting.

The behavior of the principal during the meeting did influence their silence behaviors. The groups had primarily positive views of their principals and did not fear negative consequences from speaking. How the principal chose to lead the staff meeting, however, did contribute to their levels of silence. *Get the Party Started* reported staff meetings that were more focused on the meeting agenda and contained information that could not have just been sent in an email. Individuals did not monopolize the

conversations, and the principal was receptive to new ideas and the sharing of knowledge. *I Don't Care Anymore* reported staff meetings that were focused on complaining with limited new information discussed. Although both groups had positive views of the principal, the principal's behavior management skills and meeting organizational skills influenced their choice to remain silent.

In contrast, *Don't Stop Believin'* had principals who typically used a directive leadership style. Unlike the other two groups, *Don't Stop Believin'* did not view silence as a positive behavior, and they described their principals in a variety of ways. While some principals were described in positive terms, others were described more negatively. The commonality was that they were afraid of negative consequences from speaking. Whether that fear was related to their relationships with the principal or their relationships with colleagues was not specified.

Research Question 3

Do teachers report any benefits or drawbacks of being silent during staff meetings?

All three groups reported both benefits and drawbacks of being silent during staff meetings, but the focus of the benefits and drawbacks varied between groups. *Get the Party Started* and *I Don't Care Anymore* perceived silence as primarily a personal choice. *Don't Stop Believin'* perceived their silence as determined by someone else or the meeting context. As a result, what was a benefit to one group could be a drawback to another group.

Benefits of silence during staff meetings were often contradictory, depending on personal perspectives on silence. One benefit was that silence allows people to hear

different viewpoints; others commented that silence keeps people from sharing their ideas so that there is less conflict. Silence preserves relationships; silence also keeps people from expressing their real opinions and can give the false impression of agreement. Silence can influence meeting efficiency through on-topic discussions and contribute to meetings ending early; silence can lead to suppression of ideas and knowledge in the pursuit of getting finished with the meeting more quickly. Silence allows people to have time to reflect on information and discussions; silence can indicate that a topic of discussion is not relevant or meaningful.

The frame of mind of the individual teachers, in their current school context, within their existing relationships, influenced whether a silent behavior was viewed as a benefit or a drawback at that point in time.

Interpretation of Findings

This study describes the interrelationships that can occur between the staff meeting context, principal leadership behaviors, teacher beliefs, collective teacher efficacy, and teacher silence. When teachers believe that they can make a difference in their schools, that change is possible, and that others value their opinions and knowledge, silence during staff meetings is reported to be a personal choice. When teachers believe that staff meetings are irrelevant and merely a compliance activity, and that change is not possible, silence during staff meetings is reported to be a personal choice. In these two instances, teacher silence is not perceived as oppression or lack of opportunity, but it is viewed as a conscious decision by the teacher.

In contrast, when teachers want to participate in discussions during staff meetings, but the principal does not have control over the meeting (e.g., group discussion and

behavior norms) or the topic of the meeting is not viewed as meaningful, then teacher silence is perceived as oppression or lack of opportunity. The teachers in this group do not typically feel confident or empowered to break their silence in this context.

The meeting format and how the principal designs and facilitates the meeting seems to have a more pronounced influence on teacher silence behaviors than specific leadership styles (i.e., directive, collaborative). Regardless of leadership style, if the meeting is intentionally designed and facilitated so that all teachers view the meeting information as personally relevant, and all voices are heard and acknowledged, teacher silence is viewed as a positive behavior in the meetings. When meetings are designed without thought to the needs of the teachers, or when meeting discussions are not effectively facilitated, teacher silence is viewed with ambivalence depending upon the personal motivations of the teacher and the specific context.

Context of Findings

The findings from this study help fill the knowledge gap related to teacher silence in the context of staff meetings and examine teacher silence as being both a positive and negative behavior for group functioning. Previous research on employee silence was most frequently conducted in a business setting and viewed employee silence as a primarily negative behavior. Previous research also focused mainly on the influence of trust and safety as motivators for staying silent in the workplace (Brinsfield, 2013; Chou & Chang, 2021; Detert & Edmondson, 2011; Kwon & Farndale, 2020; Sherf et al., 2021).

This study demonstrated that in the context of a school staff meeting, teachers report that a wide variety of factors impact their silence, and silence is viewed as having both positive and negative implications. Silence is not an absolute behavior, and degrees

of silence vary depending on the function of the silence (e.g., self-protection, insecurity, lack of opportunity, reflective thinking, etc.). Viewing silence in this manner would allow principals to increase their understanding of teacher silence behavior, with the understanding that the goal is not to eliminate teacher silence during meetings. Increased talking does not necessarily lead to authentic and real exchanges of information due to surface acting, like-kind preference, and preference falsification (Fiske & Lee, 2008; Gerpott & Lehman-Willenbrock, 2015; Hochschild, 1983; Shanock et al., 2013; Vendantum, 2020).

A principal that has a mostly collaborative leadership style does not ensure that all teachers will report satisfaction with their level of silence – meeting context is reported to have an even greater influence on teacher silence during staff meetings. A principal's ability to manage organizational time and resources predicts teacher satisfaction (Donohoo & Katz, 2020; Grissom et al., 2021; Ludema & Johnson, 2019; Robinson & Shuck, 2019). This study found that how the principal manages the staff meeting time and agenda seems to be more impactful on teacher satisfaction with their silence than the principal's specific leadership style.

The findings from this research extend the options of leadership behaviors that can positively impact teacher silence behaviors. It is possible that a principal can be both a directive leader and an inclusive leader, and those categories are not mutually exclusive. Directive leadership does not only refer to those leaders who are authoritarian, but it can refer to leadership that provides a clear direction while expecting cooperation from employees (Muczyk & Reimann, 1987). This study reveals that a directive leadership style does not necessarily negatively influence a teacher's silence behaviors. If

the principal outwardly demonstrates that they value the teachers and designs and facilitates impactful staff meetings, teacher silence behaviors may not be negatively influenced by a directive leadership approach.

When teachers remain silent because of a lack of opportunity or because of a fear of negative consequences, that can have implications for the school staff functioning as a cohesive unit and their ability to engage impactfully during problem-solving activities (Donohoo & Katz, 2020; Lefstein et al., 2020a; Yukl, 2010). Previous research indicated that teachers who do not feel that they have a voice during staff meetings may undermine organizational decisions and processes (Alqarni, 2020; Brinsfield, 2013; Lam et al., 2018; Netchanska et al., 2020). The current study did not reveal instances of teachers using silence behaviors to intentionally undermine organizational decisions and processes. All groups reported that they did not remain silent because of an unwillingness to share their knowledge with others (25:-3,-2,-4); their silence behaviors were due to other perspectives and contexts.

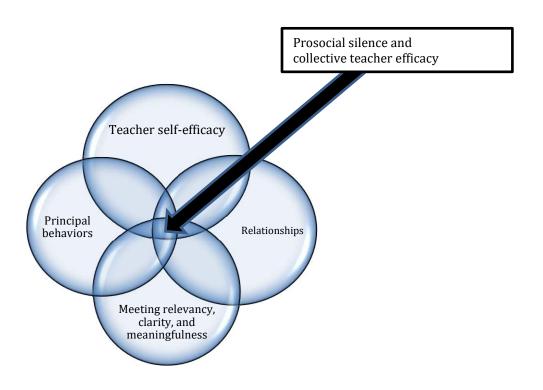
Previous research reported that meetings perceived as ineffective or not meaningful frequently result in a cooling-off period after the meeting (Rogelberg et al., 2012). This study, however, revealed that not everyone who has a negative feeling about staff meetings needs a cooling off period to recover from the meeting. While they do not see any value in staff meetings and do not think it is important that they attend the meeting, they are emotionally disengaged, and the meeting is not viewed with any emotion other than, *let's get this over with as soon as possible*.

Implications of Findings

The research found that there are complicated interrelationships between staff meeting context, principal leadership behaviors, teacher beliefs/self-efficacy, and interpersonal relationships. As a result, the terms *positive silence* and *negative silence* should be replaced with vocabulary that more aptly describes this phenomenon. *Prosocial silence* should be used as the term for describing the type of silence behaviors that lead to the building of collective teacher efficacy. Prosocial silence was originally coined by Van Dyne et al. (2003) to describe those silence behaviors that focus on benefitting others. This has direct applications to building collective teacher efficacy. Figure 6 below is a proposed diagram of the interrelationships, and the relationship to collective teacher efficacy and prosocial silence.

Figure 6

Interconnectedness of aspects related to prosocial silence and collective teacher efficacy



Teacher silence behaviors can lead to positive or negative participation during school staff meetings. Teacher silence is detrimental to group functioning when it is a result of oppression, fear of negative consequences, or a lack of engagement. Teacher silence is a positive behavior when it leads to reflective thinking or respectful communication and listening behaviors. The range of how teacher silence presents itself during staff meetings is varied and influenced by the meeting context, the relationships, the predisposition of the teacher to remain silent, and the principal's behaviors during the meeting.

Silence during staff meetings is viewed as a personal choice when teachers believe they can make a different, believe that change is possible, and think that others value their opinions and knowledge. In this case, teacher silence is not a barrier to developing and sustaining collective teacher efficacy. Silence during staff meetings is also viewed as a personal choice when teachers believe staff meetings are irrelevant and merely a compliance activity, and believe that their input during staff meeting conversations will not result in change. In this case, even though teacher silence is a choice, the reasons for the silence are disengagement and ineffectiveness. Therefore, silence behaviors are a barrier to developing and sustaining collective teacher efficacy.

Silence during staff meetings is viewed as oppressive when teachers want to participate during staff meetings, but the principal does not have control over the meeting or the topic of the meeting is irrelevant to their concerns or needs. In this case, teacher silence is a barrier to developing and sustaining collective teacher efficacy. Silencing of voices can reduce the school's ability to solve complex problems and make decisions (Donohoo, 2017; Donohoo & Katz, 2020; Freire, 2000; Vedder-Weiss et al., 2018).

The study results support the need for technology and differentiated communication methods for teachers to convey meeting information (Rogelberg, 2019a). Teachers use different communication methods to convey information to students (e.g., printed material, email, google surveys, shared google documents, google classroom, online discussion boards, robocalls, etc.). Teachers should be given the same consideration. Participants in the study reported that they prefer different types of communication during staff meetings: one-on-one and small group discussions versus whole group discussions; different amount of small talk time before the meeting starts; and varying amounts of time needed to think before they contribute to discussions. With the increase in technology, principals should consider using different methods to communicate information to teachers. Teachers reported that they did not appreciate staff meetings that contained information that could have been sent in an email.

The study revealed that the staff meeting topics' intentionality, clarity, and relevancy were also important factors related to teacher silence behavior. If the staff meeting contained relevant and meaningful topics, and the teachers felt empowered and had the opportunity to talk, they were typically fine with being silent. It was their choice. Teachers did not want imposed silence due to the meeting context or lack of a meaningful topic. Teachers want to hear new information rather than redundant or repeated information. The supports previous research findings that found that meetings can be transformational when they are designed and implemented in a way that builds employee engagement, participation, inclusion, group cohesion, communication, and buy-in with organizational goals and vision (Bernstein & Ringel, 2018; Rogelberg, 2019a; Stohl, 2001).

These findings also align with research on teacher clarity (Assof et al., 2018). Clarity about the purpose of the meeting, clarity about why the topics are important to the teachers, clarity about group discussion and meeting norms, and clarity about meeting time frames influence a teacher's silence behaviors during staff meetings.

Collective teacher efficacy is built through a belief that teachers can make a difference in their schools (Bandura, 1998; Donohoo, 2017; Donohoo & Katz, 2020). When teachers come to staff meetings believing that they can make a difference in their schools, silence behaviors are reported to be intentional and based on reflective thinking or listening to the ideas of others to gain knowledge and collaborate. When teachers come to staff meetings feeling like nothing will change, there is an instant barrier to developing collective teacher efficacy for the entire school. Teachers need to feel that change is possible in their schools for collective efficacy to flourish (Donohoo & Katz, 2020; Donohoo, 2017; Dweck, 2000).

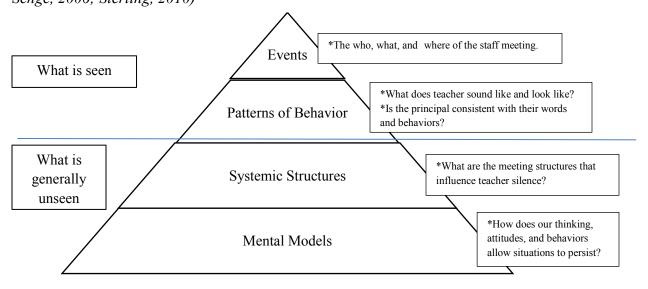
I Don't Care Anymore and Don't Stop Believin' view teacher silence as a means to end the staff meeting early. If meetings are always scheduled with a non-negotiable beginning and ending time, this may lead to a reduction in the use of teacher silence for that purpose. Silence behaviors would no longer result in decreased meeting times. This would not necessarily impact teacher silence behaviors unless other meeting format changes were made.

Teachers stay silent for a multitude of reasons that are not readily apparent to the principal (Bernstein & Ringel, 2018; Freire, 2000; Patterson et al., 2012; Peng & Wei, 2020; Rogelberg, 2019a). Therefore, teacher silence can be viewed and understood within the framework of Hall's Iceberg Model (1976) and Senge's Systems Thinking (2006).

In the Iceberg framework (Figure 7), aspects that influence a culture or a phenomenon are either seen or generally unseen by individuals in a particular situation (Hall, 1976). Some aspects of a culture or phenomenon—in this case, teacher silence during staff meetings—are above the water line in the iceberg analogy; those aspects are visible to everyone in the situation (Hall, 1976). Other aspects of a culture or phenomenon are not visible; they are the ones that are below the water in the iceberg analogy (Hall, 1976). Without additional observation and analysis, these aspects or influencing factors cannot be easily seen or identified.

Figure 7

Iceberg Model of Teacher Silence During Staff Meetings (adapted from Abson et al., 2017; Bosch et al., 2007; Davelaar, 2021; Hall, 1976; Meadows, 2008; Senge, 2006; Sterling, 2010)



Events and patterns of behavior provide information about what is visibly seen with teacher silence during the staff meeting. Concentrating observations on events will only fix the symptom of the problems or will result in ignoring the existence of a potential problem (i.e., inequity or oppression of voices) (Davelaar, 2021). Concentrating

on understanding *patterns of behavior* results in situation specific learning and problem solving (Davelaar, 2021). What you see on the surface does not tell you the reasons for the silence in all instances. Surface acting can appear when the teacher's voice is shared, but not the real message; they are still silent with their true authentic feelings (Hochschild, 1983).

When principals focus on these two levels, they learn about what teacher silence looks like and sounds like during the staff meeting. Problem solving focused at this level, however, will only lead to a surface analysis of teacher silence. Comprehensive understanding of teacher silence and equity are not accomplished at this level, since the root cause of teacher silence has not been identified.

In order to leverage teacher silence and meeting context to transform organizations, principals must focus on *systemic structures* and *mental models* (Davelaar, 2021). Understanding teacher silence and meeting context at these levels helps answer the questions: What are the meeting structures that influence teacher silence? How does our thinking and our attitudes about meetings and teacher silence allow this situation to persist? At these deeper levels, issues of equity can be recognized, analyzed, and remediated. Transformation of staff meetings into a context where teachers engage in silence behaviors that are due to their own choices and reflect collective teacher efficacy can only happen when principals focus on understanding behaviors and attitudes at these levels, as well as when the systemic structures of a staff meeting are redesigned. Table 16 below indicates possible reflection questions for each level of the iceberg. Those questions can help guide analysis of teacher silence during staff meetings.

Table 16

Reflection Questions for Each Level of the Iceberg

Events – the who, what, and where of the staff meeting

What type of staff meeting – in person, virtual, small group, large group? Where is the staff meeting held? What is the agenda for the staff meeting? Who is invited to the meeting?

Patterns of Behavior – *what* does teacher silence look like and sound like?

Are there any counterproductive meeting behaviors observed?

Who is typically silent during meetings? Who is not silent?

Are most staff meetings characterized by teachers being silent?

Is there one person or a few people who are monopolizing the discussions?

Is the principal consistent with their words and behaviors?

Systemic Structures – What are the structures that influence teacher silence?

What meeting structures are in place?

Is an agenda provided prior to the meeting so that teachers have an opportunity to think about the topics beforehand?

Does the meeting start and end on time?

Are group norms established and followed?

How are disagreement handled – is there conflict and stress when people do not agree or are different opinions and perspectives explicitly valued?

What is the purpose of the staff meeting? Are there clear goals and learning intentions? Is the topic relevant and meaningful to the teachers who are at the staff meeting?

Mental Models – How does our thinking allow this situation to persist?

What is the principal's attitude towards staff meetings? Does the principal view staff meetings as a meaningful activity, or only done because mandated, or as a means to review email communications?

What are the teacher and principal expectations for the meeting?

Does the principal exhibit personal characteristics of fairness, trust, commitment, and competence?

What are teacher's expectations of silence during staff meetings? Do they come to the staff meeting expecting to be silent? Are they satisfied with their level of silence during the meeting?

What are the teacher's perceptions of their own self-efficacy?

What are the attitudes of teachers towards their silence and the silence of others?

What are the internal reasons that teachers silent? Intentional or unintentional silence?

Note. This table is adapted from Abson et al., 2017; Bosch et al., 2007; Davelaar, 2021; Hall, 1976; Meadows, 2008; Senge, 2006; Sterling, 2010.

Limitations of Study

Q-methodology does not allow results to be generalized to other populations, therefore, a limitation of this study is that findings should not be interpreted as representative of other populations or individuals. While the study participants represented a variety of ages, genders, education levels, and other demographic factors, they did not represent a variety of racial/ethnic groups. Only one participant was not White or Caucasian. This may have resulted in some viewpoints not being identified.

The *Q Method Software* ensured that all responses were correctly recorded with no errors with data entry; however, the use of the online software program did not allow participants to ask questions of the researchers during the study. If participants had questions, their only support was the help box in the online program. In addition, while the training video about how to complete the Q-sort was a part of the Q-sort administration, there was no way to ensure that the participants watched the video in its entirety before starting the Q-sort. This could have led to a misunderstanding about how to complete the sort and may have affected how some items were sorted by participants.

Since Q-methodology involves factor analysis, the researchers' interpretations of the data may reflect unconscious bias. Other researchers may interpret the data differently by focusing on relationships between factors that were not apparent to the current researchers. In addition, open-ended responses from participants may be interpreted in other ways that may not have been apparent to the current researchers.

Future Directions

Self-efficacy may be a critical factor related to a teacher's silence behaviors during staff meetings, and it also impacts the ability of a school to develop collective teacher efficacy. If a teacher has a high sense of self-efficacy, it is possible that they would either feel more in control of their silence behaviors or more dissatisfied when their voice was not heard during the staff meeting. If a teacher has a low sense of self-efficacy, it is possible that they would be more likely to remain silent during staff meetings because of concern of saying something wrong or because of not feeling that anything would change anyways.

Future research should explore the relationship between self-efficacy and teacher silence during meetings. Dr. Nicole Law, a Corwin Professional Learning Consultant emphasized, "you can't get collective efficacy if you don't know what you bring to the team. You can't give what you don't have" (N. Law, personal communication, March 21, 2022). Increased understanding of the relationships between teacher silence, self-efficacy, and collective teacher efficacy are necessary so that principals can build teacher capacity and ensure equitable and inclusive staff meeting engagement.

Hattie's visible learning meta-analysis (2021) reports on specific influences that can substantially impact student achievement. Future research could investigate if specific influences on student achievement hold the same for adult learners. For example, cooperative learning versus individualistic learning has an effect size of d = 0.55 for student learners. If adult learners had similar effect sizes, that could support less reliance on sharing information through emails or watching videos that do not have an additional discussion activity as a component. Information on this topic could have significant

impacts on how information is shared with teachers and how staff meetings are designed and facilitated.

Future studies could investigate the relationship between teacher silence behaviors and the use of appropriately challenging goals during staff meetings. Hattie (2021) reported an effect size of d = 0.59 when students were provided with meaningful learning activities with clearly articulated goals for the activity/lesson. "The Goldilock's principal of challenge is not too hard, not too easy, and not too boring" (Visible Learning Meta^X, 2021). Future research could increase understanding about the relationship between this aspect of meeting context and teacher silence.

Principal/leader credibility is another factor that may influence teacher silence during staff meetings. Hattie (2021) reported that teacher credibility has an effect size of d = 1.09, which indicates that teacher credibility has the potential to considerably accelerate student learning. Future studies could research if this holds true for principal/leader credibility related to adult learners. Future research could focus on how perceptions of principal credibility influence teacher silence behaviors during staff meetings or personal feelings about their levels of silence.

This current study indicated that it was not necessarily the leadership style of the principal that influenced teacher silence behaviors. Collaborative leadership alone may not promote teacher voice without consideration of staff meeting design and facilitation factors. Future research could investigate the relationship between leadership style, meeting design, meeting facilitation skills, and teacher silence to determine areas that can be leveraged to promote teacher engagement and equity of teacher voice.

Virtual staff meetings are becoming more prevalent due to the pandemic. Future studies could investigate the perspectives on teacher silence during staff meetings that are conducted virtually. This information would reveal if there are differences between teacher silence behaviors during virtual meetings compared with in person meetings. Identifying and understanding differences in meeting locations would provide additional information to principals about possible ways in which to ensure equitable and inclusive teacher participation during virtual staff meetings. This process may also help them weigh whether or not to have in-person or virtual staff meetings.

Understanding the frequency and prevalence of the different forms of teacher silence during staff meetings, both in-person and virtual meetings, would help principals identify the underlying attitudes, beliefs, and meeting structures that have the greatest impact on teacher silence behaviors. Using randomized and controlled studies to investigate this topic would allow for generalizations about teacher silence behaviors. This would help develop best practices for staff meeting planning and implementation to ensure that those who want to verbally participate are able to, while recognizing and encouraging reflective and respectful silence behaviors.

Future research could also investigate teacher silence in the context of meetings of different sizes. Research on small group meetings could include: Professional Learning Community (PLC) meetings; Individualized Education Plan (IEP) and Evaluation Team Report (ETR) meetings; or other building level committee meetings. A more complete understanding of teacher silence behaviors during these meeting contexts can assist building administrators with planning and facilitating more equitable and inclusive meetings.

Conclusion

It is the responsibility of building principals to build relationships with their teachers on an individual basis so that they can better interpret the silence behaviors. Educators constantly talk about the need to differentiate instruction for students. However, differentiated instruction should be considered by principals and district leaders as they design and facilitate staff meetings for teachers. Teachers need to understand the relevance of the staff meeting – why the meeting information is important to them personally. They need to have clarity about the meeting agenda and discussions so that they know the goals for the meeting and the expectations of what is going to be accomplished. Even if it is to just review what could have been sent, or was sent, in an email, teachers need to understand why that information is being reviewed. When adults understand the reasons for the information and the relevancy, it may impact the use of prosocial silence behaviors (e.g., reflection, respect, active listening for collaboration and problem solving).

Silence is not interpreted by viewing it as an all or nothing phenomenon. Silence does not necessarily indicate an absence of voice, and voice does not necessarily indicate an absence of silence. What lies beneath the surface of the silent behavior? Is it reflection? Is it boredom? Is it anxiety? Is it frustration? Is it respect? Fill in any emotion word, for that could indeed be what is driving the silence. Only by understanding what is under the surface of teacher silence behaviors can principals harness the power of staff meetings to build equity, collective teacher efficacy, and student achievement.

Listen for...the sound of silence.

References

- Abu-Shreah, M., & Al-Sharif, M. (2017). The meetings management of the secondary schools in Ramtha district, from the teachers' point of view. *Journal of Education and Practice*, 8(9), 13-30.
- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, *46*(1), 30-39.
- Adamson, B., & Walker, E. (2011). Messy collaboration: Learning from a learning study. *Teaching and Teacher Education*, *27*, 29-36.
- Aguilar, E. (2020). Coaching for equity: Conversations that change practice. Jossey-Bass.
- Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015).

 Employee engagement, human resource management practices, and competitive advantage. *Journal of Organizational Effectiveness: People and Performance*, 2(1), 7-35.
- Allen, J. A., & Rogelberg, S. G. (2013). Manager-led group meetings: A context for promoting employee engagement. *Group & Organization Management*, 38(5), 543-569.
- Allen, J. A., Lehmann-Willenbrock, N., & Landowski, N. (2014). Linking pre-meeting communication to meeting effectiveness. *Journal of Managerial Psychology*, 29(8), 1064-1081.

- Allen, J. A., Lehmann-Willenbrock, N., & Rogelberg, S. G. (2018). Let's get this meeting started: Meeting lateness and actual meeting outcomes. *Journal of Organizational Behavior*, 39(8), 1008–1021.
- Allen, J. A., Yoerger, M. A., Lehmann-Willenbrock, N., & Jones, J. (2015). Would you please stop that!? The relationship between counterproductive meeting behaviors, employee voice, and trust. *Journal of Management Development*, *34*(10), 1272-1287.
- Alqarni, S. A. (2020). How school climate predicts teachers' organizational silence.

 International Journal of Educational Administration and Policy Studies, 12(1), 12-27.
- Assof, J., Amador, O., Fisher, D., & Frey, N. (2018). The teacher clarity playbook, grades K-12: A hands-on guide to creating learning intentions and success criteria for organized, effective instruction. Corwin.
- Bandura, A. (1998). Personal and collective efficacy in human adaptation and change. In J. G. Adair, D. Belanger, & K. L. Dion (Eds.), *Advances in psychological science, Vol. 1: Social, personal, and cultural aspects* (pp. 52-71). Psychology Press.
- Bang, H., Fuglesang, S. L., Ovesen, M. R., & Eilertsen, D. E. (2010). Effectiveness in top management group meetings: The role of goal clarity, focused communication, and learning behavior. *Scandinavian Journal of Psychology*, *51*, 253-261.
- Berg, J. H., & Homan, E. C. (2021). Overcoming the inertia of inequity. *Educational Leadership*, 78(6), 80-81.

- Bernstein, M., & Ringel, R. (2018, February 26). *Plan a better meeting with design thinking*. Harvard Business Review. https://hbr.org/2018/02/plan-a-better-meeting-with-design-thinking
- Berry, A. (2020). Disrupting to driving: Exploring upper primary teachers' perspectives on student engagement. *Teachers and Teaching*, *26*(2), 145-165.
- Bosch, O., Maani, K., & Smith, C. (2007). Systems thinking—Language of complexity for scientists and managers. In S. Harrison, A. Bosch, 7 J. Herbohn (Eds.), *Improving the triple bottom line returns from small-scale forestry* (pp. 57-66). Gatton.
- Brinsfield, C. T. (2013). Employee silence motives: Investigation of dimensionality and development of measures. *Journal of Organizational Behavior*, *34*, 671-697.
- Brown, C., Poortman, C., Gray, H., Ophoff, J. G., & Wharf, M. (2021). Facilitating collaborative reflective inquiry amongst teachers: What do we currently know? *International Journal of Educational Research*, 105, 1-11.
- Brown, S. R. (1980). Political subjectivity: Applications of Q methodology in political science. Yale University Press.
- Bui, H. T. M. (2020). From the fifth discipline to the new revolution: What we have learnt from Senge's ideas over the last three decades. *The Learning Organization*, 27(6), 495-504.
- Cain, S. (2012). *Quiet: The power of introverts in a world that can't stop talking*. Crown Publishers.

- Choi, S. B., Tran, T. B. H., & Kang, S. W. (2017). Inclusive leadership and employee well-being: The mediating role of person-job fit. *Journal of Happiness Studies*, *18*(6), 1877-1901.
- Chou, S. Y., & Chang, T. (2020). Employee silence and silence antecedents: A theoretical classification. *International Journal of Business Communication*, 57(3), 401-426.
- Chou, S. Y., & Chang, T. (2021). Feeling capable and worthy? Impact of employee silence on self-concept: Mediating role of organizational citizenship behaviors. *Psychological Reports*, *124*(1), 266-298.
- Clark, D. (2020). Escaping the drama triangle: Strategies for successful research administration from the psychology of codependence. *Journal of Research Administration*, 51(2), 84-101.
- Cohen, M. A., Rogelberg, S. G., Allen, J. A., & Luong, A. (2011). Meeting design characteristics and attendee perceptions of staff/team meeting quality. *Group Dynamics: Theory, Research, and Practice*, *15*, 90-104.
- Corwin. (2016, September 15). Quaglia institute school voice report is first to present data from survey of teachers, students, and parents. Cision PR Newswire. https://www.prnewswire.com/news-releases/2016-quaglia-institute-school-voice-report-is-first-to-present-data-from-survey-of-teachers-students-and-parents-300328418.html
- Cross, R. (2005). Exploring attitudes: The case for Q-methodology. *Health Education Research*, 20(2), 206-213.
- Daly, C., Davidge-Smith, L., Williams, C., & Jones, C. (2020). Is there hope for action

- research in a 'directed profession'? London Review of Education, 18(3), 339-355.
- Darling-Hammond, L. (2014, Spring). One piece of the whole: Teacher evaluation as part of a comprehensive system for teaching and learning. *American Educator*, 4-13. https://files.eric.ed.gov/fulltext/EJ1023870.pdf
- Davelaar, D. (2021). Transformation for sustainability: A deep leverage points approach. Sustainability Science, 16, 727-747.
- Deal, T. E., Purinton, T., & Waetjen, D. C. (2009). *Making sense of social networks in schools*. Corwin.
- Detert, J. R., & Edmondson, A. C. (2011). Implicit voice theories: Taken-for-granted rules of self-censorship at work. *Academy of Management Journal*, *54*(3), 461-488.
- Diestel, S., & Schmidt, K. H. (2012). Lagged mediator effects of self-control demands on psychological strain and absenteeism. Journal of Occupational and Organizational Psychology, 85, 556-578.
- Donaghey, J., Cullinane, N., Dundon, T., & Wilkinson, A. (2011). Reconceptualizing employee silence: Problems and prognosis. *Work Employment Society*, *25*, 51-67.
- Donohoo, J. (2017). Collective efficacy: How educators' beliefs impact student learning.

 Corwin.
- Donohoo, J., & Katz, S. (2020). Quality implementation: Leveraging collective efficacy to make "what works" really work. Corwin.
- Durning, D., & Osuna, W. (1996). Policy analysts' roles and value orientations: An empirical investigation using Q-methodology. *Journal of Policy Analysis & Management*, 13(4), 629-657.

- Dweck, C. S. (2000). Self-theories: Their role in motivation, personality, and development. Psychology Press.
- Elfers, A. M. & Plecki, M. L. (2019). School leaders and teacher evaluation: Learning, leading, and balancing responsibilities. Center for the Study of Teaching and Policy, University of Washington.
- Erks, R., Nyquist, E., Allen, J., & Rogelberg, S. (2017). Regulating emotions in response to power distance in meetings. *Journal of Management Development*, *36*(10), 1247-1259.
- Faure, S., Aroles, J., & de Vaujany, F. X. (2020). At the heart of new work practices: A paradoxical approach to silence in a coworking space. *Ephemera Theory & Politics in Organization*, 20(4), 307-322.
- Finkelstein, C., Jaber, L. Z., & Dini, V. (2019). "Do I feel threatened? No... I'm learning!"--Affective and relational dynamics in science professional development. *Science Education*, 103, 338-361.
- Fisher, D., Frey, N., & Hattie, J. (2016). Visible learning for literacy: Implementing the practices that work best to accelerate student learning. Corwin.
- Fiske, S. T., & Lee, T. L. (2008). Stereotypes and prejudice create workplace discrimination. In A. P. Brief (Ed.), *Diversity at work* (pp. 13–52). Cambridge University Press.
- France, P. E. (2021). Collective efficacy or toxic positivity? *Educational Leadership*, 79(3), 32-37.
- Freire, P. (2000). *Pedagogy of the oppressed* (30th anniversary ed.). Bloomsbury Academic.

- Freire, P. (1970). Pedagogy of the oppressed. Herder and Herder.
- Fullan, M., & Quinn, J. (2016). Coherence: The right drivers in action for schools, districts, and systems. (1st ed.). Corwin.
- Gerpott, F., & Lehmann-Willenbrock, N. (2015). How differences make a difference:

 The role of team diversity in meeting processes and outcomes. In J. Allen, N.

 Lehmann-Willenbrock, & S. G. Rogelberg (Eds.), *The Cambridge book of meeting science* (pp. 155-203). Cambridge University Press.
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2018). SuperVision and instructional leadership: A developmental approach. (10th ed.). Pearson.
- Goddard, Y., Goddard, R., & Kim, M. (2015). School instructional climate and student achievement: An examination of group norms for differentiated instruction. *American Journal of Education*, 122(1), 111-131.
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Education Research Journal*, 48(5), 1091-1123.
- Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). How principals affect students and schools: A systematic synthesis of two decades of research. *The Wallace Foundation*. https://www.wallacefoundation.org/knowledge-center/Documents/How-Principals-Affect-Students-and-Schools.pdf
- Hall, E. T. (1976). Beyond Culture. Anchor Books.

- Hamstra, M. R. W., Schreurs, B., Jawahar, I. M., Laurijssen, L. M., & Hünermund.(2021). Manager narcissism and employee silence: A socio-analytic theoryperspective. *Journal of Occupational and Organizational Psychology*, 94, 29-54.
- Hargreaves, M., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- Hattie, J. (2015). What works best in education: The politics of collaborative expertise.

 Pearson.
- Hattie, J., & Clarke, S. (2018). Visible learning feedback. Routledge.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*.

 University of California Press.
- Horng, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness. *American Journal of Education*, *116*(4), 491–523. https://doi.org/10.1086/653625
- Hsiung, H. H. (2012). Authentic leadership and employee voice behavior: A multi-level psychological process. *Journal of Business Ethics*, *107*(3), 349-361.
- Johnson, B. J. (2021). Video meetings in a pandemic era: Emotional exhaustion, stressors, and coping [Doctoral dissertation, Antioch University]. Antioch University Repository & Archive. https://aura.antioch.edu/etds/623/
- Jolliffe, I. T., & Cadima, J. (2016). Principal component analysis: A review and recent developments. *Philosophical Transactions Royal Society A*, 374, 1-16.
- Jolly, P. M., & Lee, L. (2021). Silence is not golden: Motivating employee voice through inclusive leadership. *Journal of Hospitality & Tourism Research*, 45(6), 1092-1113.

- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Karpman, S. (1968). Fairy tales and script drama analysis. *Transactional Analysis Bulletin*, 7(26), 39-43.
- Kauffeld, S., & Lehmann-Willenbrock, N. (2012). Meetings matter: Effects of team meetings on team and organizational success. *Small Group Research*, *43*(2), 130-158.
- King, D. D., Ryan, A. M., & Van Dyne, L. (2019). Voice resilience: Fostering future voice after non-endorsement of suggestions. *Journal of Occupational and Organizational Psychology*, 92, 535-565.
- Korobov, N. (2020). Discourse analysis: Combining rigor with application and intervention. *Qualitative Psychology*, 7(3), 326-330.
- Kuran, T. (1997). Private truths, public lies: The social consequences of preference falsification. Harvard University Press.
- Kwon, B., & Farndale, E. (2020). Employee voice viewed through a cross-cultural lens. *Human Resource Management Review*, 30, 1-11.
- Lam, C. F., Rees, L., Levesque, L. L., & Ornstein, S. (2018). Shooting from the hip: A habit perspective of voice. *Academy of Management Review*, 43(3), 470-486.
- Larwin, K. H., Thomas, E. M., & Larwin, D. A. (2015). Subtractive leadership. *Journal* of International Education and Leadership, 5(2), 1-7.
- Lefstein, A., Louie, N., Segal, A., & Becher, A. (2020*a*). Taking stock of research on teacher collaborative discourse: Theory and method in a nascent field. *Teaching and Teacher Education*, 88, 1-13.

- Lefstein, A., Trachtenberg-Maslation, R., & Pollak, I. (2017). Breaking out of the grips of dichotomous discourse in teacher post observation debrief conversations.

 *Teaching and Teacher Education, 67, 418-428.
- Lefstein, A., Vedder-Weiss, D., & Segal, A. (2020*b*). Relocating research on teacher learning: Toward pedagogically productive talk. *Educational Researcher*, 49(5), 360-368.
- Lehmann-Willenbrock, N., & Allen, J. A. (2020). Well, now what do we do? Wait...: A group process analysis of meeting lateness. *International Journal of Business Communication*, *57*(3), 302-326.
- Lehmann-Willenbrock, N., Allen, J., & Kauffeld, S. (2013). A sequential analysis of procedural meeting communication: How teams facilitate their meetings. *Journal of Applied Communication Research*, 41, 37-41.
- Little, J. W. (2002). Locating learning in teachers' communities of practice: Opening up problems of analysis in records of everyday work. *Teaching and Teacher Education*, 18(8), 917-946.
- Ludema, J., & Johnson, A. (2019, July 23). *Silence is costly: 4 types of team members who keep quiet, and how to get their voices heard*. Forbes [online]. https://www.forbes.com/sites/amberjohnson-jimludema/2019/07/23/silence-is-costly- 4-types-of-team-members-who-keep-quiet-and-how-to-get-their-voices-heard/?sh=68e5e3b621ae
- Mafa, O. (2016). Perceptions of teachers towards staff meetings. *Journal of Research & Method in Education*, 6(2), 61-65.

- Makela, K., Kalla, H. K., & Piekkari, R. (2007). Interpersonal similarity as a driver of knowledge sharing within multinational corporations. *International Business Review*, *16*(1), 1-22.
- Mavrogordato, M., & White, R. S. (2020). Leveraging policy implementation for social justice: How school leaders shape educational opportunity when implementing policy for English learners. *Educational Administration Quarterly*, *56*(1), 3-45.
- Meadows, D. H. (2008). *Thinking in systems: A primer*. Chelsea Green Publishing.
- Mirivel, J. C., & Tracy, K. (2005). Premeeting talk: An organizationally crucial form of talk. *Research on Language and Social Interaction*, 38(1), 1-34.
- Morgan, P. (2014, October 30). *How to stop your relationship drama: Part 2*. [Blog]. https://www.solutionsforresilience.com/?s=drama+triangle
- Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *The Academy of Management Annals*, *5*(1), 373-412.
- Mroz, J. E., Allen, J. A., Verhoeven, D. C., & Shuffler, M. L. (2018). Do we really need another meeting? The science of workplace meetings. *Current Directions in Psychological Science*, 27(6), 484-491.
- Mroz, J. E., Landowski, N., Allen, J. A., & Fernandez, C. (2019). Organizational meeting orientation: Setting the stage for team success or failure over time. *Frontiers in Psychology*, *10*(812), 1-12.
- Muczyk, J. P., & Reimann, B. C. (1987). The case for directive leadership. *The Academy of Management Executive*, 1(3), 301-311.
- Nechanska, E., Hughes, E., & Dundon, T. (2020). Towards an integration of employee voice and silence. *Human Resource Management Review, 30*, 1-13.

- Osman, D. J., & Warner, J. R. (2020). Measuring teacher motivation: The missing link between professional development and practice. *Teaching and Teacher Education*, 92, 1-12.
- Patterson, K., Grenny, J., McMillan, R., & Switzler, A. (2012). *Crucial conversations:*Tools for talking when stakes are high. (2nd ed.). McGraw Hill Education.
- Peercy, M. M., Martin-Beltran, M., Silverman, R. D., & Daniel, S. (2015). Curricular design and implementation as a site of teacher expertise and learning. *Teachers and Teaching: Theory and Practice*, 21(7), 867-893.
- Peng, H., & Wei, F. (2020). How and when does leader behavioral integrity influence employee voice? The roles of team independence climate and corporate ethical values. *Journal of Business Ethics*, *166*, 505-521.
- Philpott, C., & Oates, C. (2017). Professional learning communities as drivers of educational change: The case of learning rounds. *Journal of Educational Change*, 18, 209-234.
- Polzer, J. T., Milton, L. P., & Swarm, W. B. (2002). Capitalizing on diversity:

 Interpersonal congruence in small work groups. *Administrative Science Quarterly*,

 47(2), 296-324.
- Preston, B. C., & Donohoo, J. (2021). It's not collective efficacy if it's easy. *Educational Leadership*, 79(3), 26-31.
- Q Methods Software. (2021). *Data analysis*. https://qmethodsoftware.com/study-dashboard/
- Quaglia Institute for School Voice and Aspirations. (2016). *School voice report 2016*. https://quagliainstitute.org/dmsView/School_Voice_Report_2016

- Quaglia, R., Fox, K., Lande, L., & Young, D. (2020). The power of voice in schools:

 Listening, learning, and leading together. ASCD.
- Quaglia, R. J., & Lande, L. L. (2016, March/April). Teacher voice: Problem or potential? *Principal*. https://www.naesp.org/principal-marchapril-2016-new-approaches-instruction/ teacher-voice-problem-or-potential
- Rogelberg, S. G. (2019a). The surprising science of meetings: How you can lead your team to peak performance. Oxford.
- Rogelberg, S. G. (2019b, January-February). Why your meetings stink--and what to do about it. *Harvard Business Review*. https://hbr.org/2019/01/why-your-meetings-stink-and-what- to-do-about-it
- Rogelberg, S. G., Shanock, L. R., & Scott, C. W. (2012). Wasted time and money in meetings: Increasing return on investment. *Small Group Research*, *43*(2), 236-245.
- Robinson, R., & Shuck, B. (2019). A penny for your thoughts: Exploring experiences of engagement, voice, and silence. *Journal of Organizational Psychology*, 19(4), 121-135.
- Scott, C., Allen, J. A., Rogelberg, S. G., & Kello, A. (2015). Five theoretical lenses for conceptualizing the role of meetings in organizational life. In J. A. Allen, N.
 Lehmann-Willenbrock, & S. G. Rogelberg (Eds.), *The Cambridge handbook of meeting science* (pp. 20-46). Cambridge University Press.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. Doubleday.

- Senge, P. M. (2006). The fifth discipline: The art and practice of the learning organization (2nd ed.). Random House.
- Shanock, L. R., Allen, J. A., Dunn, A. M., Baran, B. E., Scott, C. W., & Rogelberg, S. G. (2013). Less acting, more doing: How surface acting relates to perceived meeting effectiveness and other employee outcomes. *Journal of Occupational and Organizational Psychology*, 86, 457-476.
- Sherf, E. N., Parke, M. R., & Isaakyan, S. (2021). Distinguishing voice and silence at work: Unique relationships with perceived impact, psychological safety, and burnout. *Academy of Management Journal*, 64(1), 114-148.
- Sinek, S. (2018). Leaders eat last: Why some teams pull together and others don't.

 Portfolio Penguin.
- Stainton Rogers, R. (1985). Q methodology. In J. A. Smith, R. Harré, & L. Van Langenhove (Eds.), *Rethinking Methods in Psychologym* (pp. 178-192). SAGE.
- Starzyk, A., Sonnentag, S., & Albrecht, A. (2018). The affective relevance of suggestionfocused and problem-focused voice: A diary study on voice in meetings. *Journal* of Occupational and Organizational Psychology, 91, 340-361.
- Stephenson, W. (1953). *The study of behavior: Q technique and its methodology*. University of Chicago Press.
- Sterling, S. (2010). Transformative learning and sustainability: Sketching the conceptual ground. *Learning Teaching Higher Education*, *5*, 17-33.
- Stohl, C. (2001). Participatory processes/paradoxical practices: Communication and the dilemmas of organizational democracy. *Management Communication Quarterly*, 14(3), 349-407.

- Stouten, J., Tripp, T. M., Bies, R. J., & De Cremer, D. (2019). When something is not right: The value of silence. *Academy of Management Perspectives*, *33*(3), 323-333.
- Trochim, W, M., Donnelly, J. P., & Aurora, K. (2016). *Research methods: The essential knowledge base.* (2nd ed.). Cengage Learning.
- Valenta, A. & Ulrike, W. (1997). Q-methodology: Definition and application in health care informatics. *Journal of the American Medical Informatics Association*, 4(6), 501-510.
- Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359-1392.
- Vedantam, S. (2020, November 30). A conspiracy of silence [Audio podcast episode]. In *Hidden Brain*. NPR. https://hiddenbrain.org/podcast/a-conspiracy-of-silence
- Vedder-Weiss, D., Ehrenfeld, N., Ram-Menashe, M., & Pollak, I. (2018). Productive framing of pedagogical failure: How teacher framings can facilitate or impede learning from problems of practice. *Thinking Skills and Creativity*, *30*, 31-41.
- Visible Learning Meta^X. (2022, March 21). *Global data base*. https://www.visiblelearningmetax.com/Influences
- Watts, S., & Stenner, P. (2012). Doing Q methodological research: Theory, method & interpretation. Sage.
- Woodland, R. H., & Mazur, R. (2019). Of teams and ties: Examining the relationship between formal and informal instructional support networks. *Educational Administration Quarterly*, 55(1), 42-72.

- Yoerger, M., Crowe, J., & Allen, J. A. (2015). Participate or else!: The effect of participation in decision-making in meetings on employee engagement.

 Consulting Psychology Journal: Practice and Research, 67(1), 65-80.
- Yukl, G. (2010). Leadership in organizations. (7th ed.). Prentice Hall.
- Zabala, A., Sandbrook, C., & Mukherjee, N. (2018). When and how to use Q-methodology to understand perspectives in conservation research. *Conservation Biology*, 32(5), 1185-1194.
- Zijlstra, F. R., Waller, M. J., Phillips, S. I., Sybil, I., Meyer, B., Gockel, C., Roe, R., & Tschan, F. (2012). Setting the tone: Early interaction patterns in swift-starting teams as a predictor of effectiveness. *European Journal of Work and Organizational Psychology*, 21(5), 749-777.

Appendix A

Original List of Concourse Statements

When I am in a staff meeting, my behavior and mindset during the meeting is....

- 1. I remain silent during meetings because I will not find a sympathetic ear anyways.
- 2. I remain silent during meetings because others are not open to my proposals or concerns.
- 3. I remain silent at meetings because nothing will change anyways.
- 4. I am good at communicating with others.
- 5. I am good at finding solutions to problems.
- 6. It is difficult for me to advocate for my ideas.
- 7. My temperament is not well-suited for dealing with problems or disagreements.
- 8. I am good at finding out what others want.
- 9. It is easy for me to get others to see my point of view.
- 10. It is important for me to be at staff meetings.
- 11. I am trusted at school.
- 12. Others have faith in me at school.
- 13. I am helpful to others at school.
- 14. I am cooperative during staff meetings.
- 15. I help others who are absent for the meeting.
- 16. I help others who have heavy workloads.
- 17. I assist the principal with his/her work (when not asked to do so).
- 18. I am efficient at school.
- 19. I can make a difference at school.
- 20. I am important at school.
- 21. I take time to listen to coworkers' problems and worries.
- 22. I go out of my way to help new staff members.
- 23. I go out of my way to help coworkers who are having technical problems during the meeting.
- 24. I take a personal interest in coworkers.
- 25. I pass along meeting information to coworkers who are absent.
- 26. My attendance at meetings is above the norm.
- 27. I complain about insignificant things during meetings.
- 28. I adhere to informal rules devised to maintain order.
- 29. I remain silent at meetings to not give away my knowledge advantage.
- 30. I remain silent during meetings because of concerns that others could take advantage of my ideas.
- 31. I remain silent during meetings because that would mean having to do additional work.

- 32. I remain silent during meetings because I do not want to hurt the feelings of others.
- 33. I remain silent during meetings so that I don't embarrass others.
- 34. I remain silent during meetings because of fear of negative consequences.
- 35. I remain silent during meetings because I fear disadvantages from speaking.
- 36. I remain silent during meetings to not make me vulnerable in the face of colleagues or administrators.
- 37. The information shared sometimes could be handled in an email.
- 38. Sometimes staff meetings are valuable and relevant.
- 39. Sometimes staff meetings are a waste of time.
- 40. I remain silent because there is not adequate time for discussion during staff meetings.
- 41. There is no opportunity for me to speak because others are monopolizing the discussion.
- 42. I need time to think about issues before I contribute to discussions.
- 43. I am good at thinking on my feet.
- 44. When an issue is important to me, I will not stay silent during staff meetings.
- 45. I am involved in formal or informal leadership roles at school.
- 46. I remain silent unless the topic affects my own classroom.
- 47. I can be impulsive when speaking or sharing my ideas.
- 48. I often regret what I said during staff meetings.
- 49. I often regret what I did not say during staff meetings.
- 50. When the staff meeting is finished I do not tend to think about it anymore.
- 51. When the staff meeting is finished I tend to reflect on what was said during the meeting.
- 52. I need time to decompress after the staff meeting.
- 53. It is important that staff meetings start on time.
- 54. It is important that staff meetings end on time.
- 55. I spend time looking at the staff meeting agenda prior to the meeting so that I know the specific discussion topics that may arise.
- 56. When someone states incorrect information during a staff meeting, I stay silent instead of correcting them in front of the group.
- 57. When someone states incorrect information during a staff meeting, I speak to that person after the meeting or send them an email.
- 58. I think that having informal conversation time is important during staff meetings.
- 59. I enjoy ice breaker activities at the beginning of meetings.
- 60. My principal takes a personal interest in me.

Appendix B

Descriptive Data for Each Participant

Study	What is	Which of the	Which of the	Which of the	What is the	Are you a	How many	Factor
Code	your age?	following best	following best	following	highest level	member of a	years have you	
		describes you?	describes your	best	of education	teachers'	been working	
			gender	describes the	you have	union?	as a full-time	
			identification?	setting of	completed?		teacher in your	
				your current			current school	
				school?			building?	
T2NC	40-49	White or	Female	Urban	Master's	Yes	20+ years	1
	years old	Caucasian			degree			
GN7R	40-49	Black or African	Female	Urban	Master's	Yes	20+ years	1
	years old	American			degree			
R1WZ	50-59	White or	Female	Suburban	Bachelor's	Yes	10-15 years	1
	years old	Caucasian			degree			
UUM7	50-59	White or	Female	Suburban	Master's	Yes	5-10 years	1
	years old	Caucasian			degree			
P644	60+ years	White or	Male	Suburban	Master's	No	1-4 years	1
	old	Caucasian			degree			
OKVI	50-59	White or	Female	Urban	Master's	Yes	5-10 years	1
	years old	Caucasian			degree			
CU18	40-49	White or	Female	Urban	Master's	Yes	5-10 years	1
	years old	Caucasian			degree			
6BOC	30-39	White or	Male	Rural	Master's	Yes	1-4 years	1
	years old	Caucasian			degree			
R63A	30-39	White or	Female	Suburban	Master's	Yes	10-15 years	1
	years old	Caucasian			degree			
AA5K	30-39	White or	Female	Urban	Master's	Yes	10-15 years	1
	years old	Caucasian			degree			
P1X3	50-59	White or	Female	Urban	Master's	Yes	5-10 years	1
	years old	Caucasian			degree			

WGLI	40-49	White or	Female	Suburban	Doctoral	No	15-20 years	1
	years old	Caucasian			degree			
T75W	50-59	White or	Male	Rural	Doctoral	Yes	10-15 years	1
	years old	Caucasian			degree			
KBMU	50-59	White or	Female	Urban	Master's	Yes	20+ years	1
	years old	Caucasian			degree			
JK3A	30-39	White or	Male	Suburban	Master's	Yes	1-4 years	2
	years old	Caucasian			degree			
YAG6	40-49	White or	Female	Suburban	Master's	Yes	10-15 years	2
	years old	Caucasian			degree			
3BHM	30-39	White or	Male	Suburban	Master's	No	5-10 years	2
	years old	Caucasian			degree			
3VMI	30-39	White or	Male	Suburban	Master's	Yes	5-10 years	2
	years old	Caucasian			degree			
BVQJ	30-39	White or	Female	Suburban	Master's	Yes	5-10 years	2
	years old	Caucasian			degree			
6FGU	40-49	White or	Male	Suburban	Master's	Yes	20+ years	2
	years old	Caucasian			degree			
2NVV	40-49	White or	Female	Urban	Master's	Yes	10-15 years	2
	years old	Caucasian			degree			
2QK3	20-29	White or	Female	Suburban	Master's	Yes	5-10 years	3
	years old	Caucasian			degree			
G7YN	30-39	White or	Male	Suburban	Master's	Yes	5-10 years	3
	years old	Caucasian			degree			
D4NX	30-39	White or	Male	Suburban	Bachelor's	Yes	1-4 years	3
	years old	Caucasian			degree			
ЕЗНР	50-59	White or	Female	Suburban	Master's	Yes	20+ years	3
	years old	Caucasian			degree			
TBFZ	30-39	White or	Male	Urban	Master's	Yes	5-10 years	3
	years old	Caucasian			degree			
ERPR	30-39	White or	Female	Urban	Bachelor's	Yes	10-15 years	3
	years old	Caucasian			degree			

19LO	40-49	White or	Female	Suburban	Master's	Yes	20+ years	3
	years old	Caucasian			degree			
EIT8	60+ years	White or	Female	Urban	Master's	Prefer not to	20+ years	none
	old	Caucasian			degree	answer		
2531	40-49	White or	Male	Urban	Master's	Yes	10-15 years	none
	years old	Caucasian			degree			
1BFX	40-49	White or	Female	Suburban	Master's	Yes	20+ years	none
	years old	Caucasian			degree			
CAB4	20-29	White or	Female	Suburban	Bachelor's	Yes	1-4 years	none
	years old	Caucasian			degree			
D6P9	30-39	White or	Female	Suburban	Bachelor's	Yes	10-15 years	none
	years old	Caucasian			degree			
88DK	50-59	White or	Female	Urban	Master's	Yes	20+ years	none
	years old	Caucasian			degree			
HB9X	40-49	White or	Male	Urban	Master's	Yes	20+ years	none
	years old	Caucasian			degree			
FVD0	40-49	White or	Male	Suburban	Master's	Yes	20+ years	none
	years old	Caucasian			degree			
JES7	40-49	White or	Male	Urban	Master's	Yes	5-10 years	none
	years old	Caucasian			degree			
JV7O	50-59	White or	Male	Suburban	Bachelor's	Yes	20+ years	none
	years old	Caucasian			degree			

Note. One participant (JFST) did not provide any demographic information.

Appendix C

Correlation Matrix Between Sorts

	19LO	1BFX	2531	2NVV	2QK3	звнм	3VMI	6BOC	6FGU	88DK	AA5K	BVQJ	CAB4	CU18	D4NX	D6P9	E3HP	EIT8	ERPR
19LO	1	IDIA	2331	21111	ZQICS	SBILL	3 11111	овос	or GC	оори	TITISIC	B 1 Q3	CALDI	CC10	Ditti	Doi	Lom	Lito	LIGIK
1BFX	0.32	1																	
2531	0.49	-0.15	1																
2NVV	0.25	0.23	0.29	1															
2QK3	0.27	0.25	0.05	0.15	1														
3BHM	0.39	0.47	0.1	0.25		1													
3VMI	0.12	0.39	-0.08	0.23		0.67	1												
6BOC	0.12	0.03	0.17	-0.09				1											
6FGU	0.69	0.05	0.17	0.25		0.47	0.11	-0.11	1										
88DK	0.29	0.20	0.06	0.23		0.05	-0.01	0.06	-0.03	1									
AA5K	0.19	0.01	0.01	0.03		-0.03	0.29			0.03	1								
BVQJ	0.55	0.36	0.25	0.22		0.72	0.47			0.03			1						
CAB4	0.36	0.19	-0.23	-0.1			0.09			0.25									
CU18	0.07	0.23	-0.17	0.03		0.27	0.48		0.11	0.16									
D4NX	0.33	0.27	0.03	0.19		0.31	0.37			0.19					1				
D6P9	-0.03	-0.09	-0.15	-0.25		-0.24	0.03		-0.41	-0.05					0.1				
E3HP	0.48	0.14	0.31	0.19		0.41	0.2		0.41	0.01									
EIT8	0.19	0.24	0.07	-0.1				0.29		-0.01								1	
ERPR	0.34	0.13	0.26	0.41	0.36														
FVD0	0.13	-0.01	0.01	0.11		0.3	0.52							0.22					
G7YN	-0.25	-0.31	0.14	-0.09		-0.43	-0.03							-0.05	-0.28				
GN7R	0.39	0.23	0.02	0			0.21	0.43						0.27	0.33			0.06	
НВ9Х	0.23	-0.01	0.04	0.09		0.09		-0.03											
JES7	0.38	0.18	0.35	-0.01	0.08	-0.14													
JF5T	0.19	0.2	0.05	-0.09		0.34	0.39	0.38		0.21					0.23				
JK3A	0.47	0.17	0.38	0.35		0.69	0.37			0.14				0.19					
JV7O	0.1	-0.25	0.39	0.37		0.01	-0.2			-0.13					-0.05				
KBMU	0.03	0.26	0.05	-0.13		0.29				0.39					0.01				
OKVI	0.31	0.53	0.05	0.25		0.41	0.66								0.29				
P1X3	0.15	0.45	-0.14	0.01	0.13	0.37	0.39							0.64	0.13				
P644	-0.13	0.08	-0.17	-0.15		0.07	0.38							0.53	(
R1WZ	0.01	0.21	-0.03	-0.03		0.35		0.38							0.35			0.23	
R63A	0.25	0.03	0.09	-0.19		0			-0.03						0.3				
T2NC	0.29	0.42	0.17	0.06		0.33			0.29						0.16				
T75W	0.17	0.53	0.17	0.23		0.37									0.39			0.17	
TBFZ	0.57	0.11	0.1	0.08		0.45	0.27								0.3				
UUM7	0.15	0.28	-0.09	0.03		0.15		0.47	-0.11	0.16					0.21				
WGLI	0.08	0.15	-0.15	0.15		0.21	0.27		0.11	0.11					0.17				
YAG6	0.29	0.39	0.13	0.31		0.59	0.37								0.21				

	FVD0	G7YN	GN7R	HB9X	JES7	JF5T	JK3A	JV7O	KBMU	OKVI	P1X3	P644	R1WZ	R63A	T2NC	T75W	TBFZ	UUM7	WGLI	YAG6
19LO																				
BFX																				
2531																				
2NVV																				
2QK3																				
звнм																				
SVMI																				
6BOC																				
5FGU																				
88DK																				
AA5K																				
BVQJ																				
CAB4																				
CU18																				
D4NX																				
D6P9																				
ЗНР																				
EIT8																				
ERPR																				
FVD0																				
G7YN	0.13	3	1																	
GN7R	-0.07		7	1																
HB9X	-0.19																			
JES7	0.03																			
JF5T	0.27						1													
IK3A	0.31						-	1												
V70	0.11								1											
KBMU	-0.15									1										
OKVI	0.21										1									
P1X3	0.18								0 0.6		5	1								
2644	0.28											-	1							
RIWZ	0.37												-	1						
R63A	(0.5)													6	1					
T2NC	0.17														-	1				
Γ75W	0.26															0.5	1			
ΓBFZ	0.33																12	1		
JUM7	-0.08																	•	1	
WGLI	0.15																		3	1
YAG6	0.13																			10

Appendix D Factor Scores with Corresponding Ranks

			Factor		Factor	Factor	Factor
		Factor 1	1	Factor 2	2	3 Z-	3
No.	Statement	Z-score	Rank	Z-score	Rank	score	Rank
	It is important for me to						
1	be at staff meetings.	1.29799	3	-1.16221	-3	-1.3973	-3
	I remain silent when						
	someone states incorrect						
	information during a staff						
2	meeting.	-0.90361	-2	-0.65051	-1	0.33165	1
	I remain silent so that the						
3	meeting ends early.	-0.57328	-1	2.00966	4	1.19	2
	It is difficult for me to						
	remain silent during staff						
4	meetings.	-0.42025	-1	-1.68221	-4	-1.4225	-4
	I often regret what I did						
	not say during staff						
5	meetings.	-0.93275	-3	-1.54459	-4	-0.8803	-1
	I remain silent during						
	staff meetings because of						
	fear of negative						
	consequences from						
6	speaking.	-0.95881	-3	-1.30625	-3	0.42065	1
	I prefer one-on-one or						
	small group discussions						
	to whole group						
	discussions during staff		_				
7	meetings.	0.95191	2	0.92697	2	0.21749	0
	I remain silent during						
	staff meetings because I						
	do not want to say	0.76471	_	0.51050		0.0470	
8	something wrong.	-0.76471	-2	-0.51078	-1	-0.2473	-1
	I remain silent during						
	staff meetings because I						
0	do not want to hurt the	0.75460	1	0.66106	1	0.1172	0
9	feelings of others.	-0.75462	-1	-0.66106	-1	-0.1173	0

1	I remain silent during						
	staff meetings because						
10	nothing will change.	-0.77414	-2	1.04849	3	1.2873	3
	I usually need time to						
	decompress after a staff						
11	meeting.	-0.23766	0	-1.24419	-3	-1.2261	-3
	I enjoy small talk with						
	colleagues before the						
12	meeting begins.	0.95104	2	1.0118	2	0.66601	1
	During staff meetings, I						
	prefer not to talk about						
	my work with others until						
13	it is perfected.	-1.59698	-4	-0.91861	-2	-1.121	-2
	I remain silent during						
	staff meetings because						
	that would mean having						
14	to do additional work.	-0.36663	0	1.14812	3	-0.9903	-2
	I think that having						
	informal conversation						
	time is important during						
15	staff meetings.	0.78332	1	-0.05277	0	-0.2691	-1
	I remain silent unless the						
	topic affects my own						
16	classroom.	0.01088	0	0.08387	0	1.19675	3
	I remain silent during						
	staff meetings because I						
	will not find a						
17	sympathetic ear.	-1.683	-4	-1.0189	-2	-0.1354	0
	Most of the information						
	during the staff meeting						
	could have been sent in						
18	an email.	0.07593	1	1.60545	4	1.80362	4
	I remain silent so that I						
	am not vulnerable in the						
	face of colleagues or						
19	administrators.	-0.44719	-1	-0.6644	-1	-0.3006	-1
	I can make a difference at						
20	school.	1.58775	4	0.44583	0	0.01968	0
	Staff meeting information						
21	is relevant to me.	1.33217	3	-0.32943	0	-1.0195	-2

	I need time to think about						
	issues before I contribute						
22	to discussions.	1.1745	2	0.60532	1	0.21782	1
	I am silent during staff						
	meetings so that I can						
	listen to other people's						
23	ideas.	0.93404	1	-0.26431	0	-0.1965	0
	Discussions during the						
	staff meeting are often						
24	focused on complaining.	-0.34796	0	1.03071	3	0.99209	2
	I remain silent during						
	meetings to not give away						
25	my knowledge advantage.	-1.41475	-3	-0.77663	-2	-1.7609	-4
	I am silent because others						
	are monopolizing the						
26	discussion.	0.14703	1	0.88647	2	1.37667	4
	I am helpful to others at						
27	school.	1.80886	4	0.80749	1	1.30617	3
	I think that being silent						
	during a staff meeting is a						
28	positive behavior.	-0.0922	0	0.80598	1	-1.2445	-3
	I look at the agenda						
	before the staff meeting						
	so that I know what we						
29	will be discussing.	1.48369	3	0.53399	1	1.15474	2
	I avoid having difficult						
	conversations during staff						
30	meetings.	-0.27056	0	-0.16328	0	0.14788	0

$\label{eq:Appendix} \textbf{Appendix} \ E$ Descending Array of Differences Between Factors

Table E1

Descending Array of Differences Between Factor 1 and Factor 2, Z-Scores Greater than 1.00

No.	Statement	Factor 1	Factor 2	Differenc e
3	I remain silent so that the meeting ends early.	-0.57	2.01	-2.58
10	I remain silent during staff meetings because nothing will change.	-0.77	1.05	-1.82
18	Most of the information during the staff meeting could have been sent in an email.	0.08	1.61	-1.53
14	I remain silent during staff meetings because that would mean having to do additional work.	-0.37	1.15	-1.51
24	Discussions during the staff meeting are often focused on complaining.	-0.35	1.03	-1.38
27	I am helpful to others at school.	1.81	0.81	1.00
11	I usually need time to decompress after a staff	-0.24	-1.24	1.00
20	meeting. I can make a difference at school.	1.59	0.45	1.14
23	I am silent during staff meetings so that I can listen to other people's ideas.	0.93	-0.26	1.20
4	It is difficult for me to remain silent during staff meetings.	-0.42	-1.68	1.26
21	Staff meeting information is relevant to me.	1.33	-0.33	1.66
1	It is important for me to be at staff meetings.	1.30	-1.16	2.46

Table E2Descending Array of Differences Between Factor 1 and Factor 3, Z-Scores Greater than 1.00

No.	Statement	Factor 1	Factor 3	Difference
10	I remain silent during staff meetings because nothing will change.	-0.77	1.29	-2.06
3	I remain silent so that the meeting ends early.	-0.57	1.19	-1.76
18	Most of the information during the staff meeting could have been sent in an email.	0.08	1.80	-1.73
17	I remain silent during staff meetings because I will not find a sympathetic ear.	-1.68	-0.14	-1.55
6	I remain silent during staff meetings because of fear of negative consequences from speaking.	-0.96	0.42	-1.38
24	Discussions during the staff meeting are often focused on complaining.	-0.35	0.99	-1.34
2	I remain silent when someone states incorrect information during a staff meeting.	-0.90	0.33	-1.24
26	I am silent because others are monopolizing the discussion.	0.15	1.38	-1.23
16	I remain silent unless the topic affects my own classroom.	0.01	1.2	-1.19
22	I need time to think about issues before I contribute to discussions.	1.17	0.22	0.96
11	I usually need time to decompress after a staff meeting.	-0.24	-1.23	0.99
4	It is difficult for me to remain silent during staff	-0.42	-1.42	1.00
15	meetings. I think that having informal conversation time is important during staff meetings.	0.78	-0.27	1.05
23	I am silent during staff meetings so that I can listen to other people's ideas.	0.93	-0.2	1.13
28	I think that being silent during a staff meeting is a positive behavior.	-0.09	-1.24	1.15
20	I can make a difference at school.	1.59	0.02	1.57
21	Staff meeting information is relevant to me.	1.33	-1.02	2.35
1	It is important for me to be at staff meetings.	1.30	-1.40	2.70

Table E3Descending Array of Differences Between Factor 2 and Factor 3, Z-Scores Greater than 1.00

No.	Statement	Factor	Factor	Differenc
		2	3	e
6	I remain silent during staff meetings because of fear of negative consequences from speaking.	-1.31	0.42	-1.73
16	I remain silent unless the topic affects my own classroom.	0.08	1.2	-1.11
2	I remain silent when someone states incorrect information during a staff meeting.	-0.65	0.33	-0.98
25	I remain silent during meetings to not give away my knowledge advantage.	-0.78	-1.76	0.98
28	I think that being silent during a staff meeting is a positive behavior.	0.81	-1.24	2.05
14	I remain silent during staff meetings because that would mean having to do additional work.	1.15	-0.99	2.14

Table E4Descending Array of Differences Between Factor 1 and Factor 2

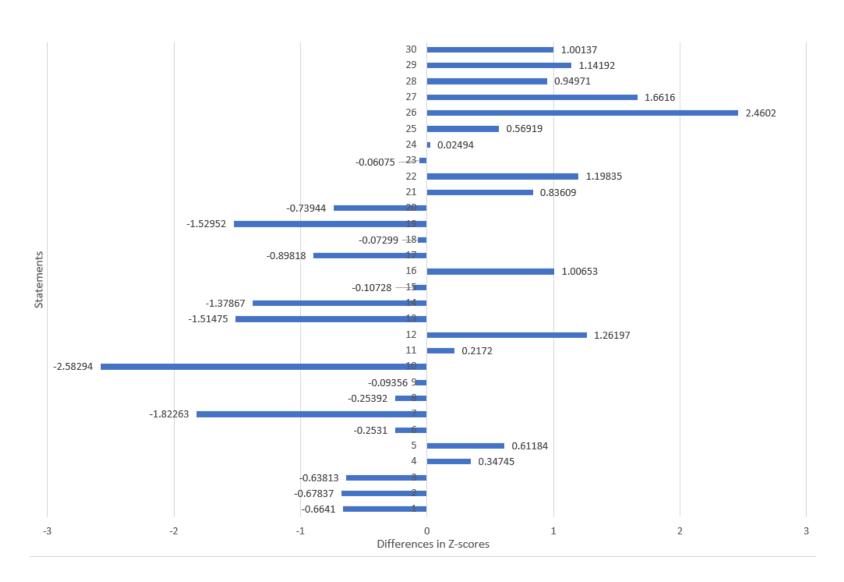


Table E5Descending Array of Differences Between Factor 1 and Factor 3

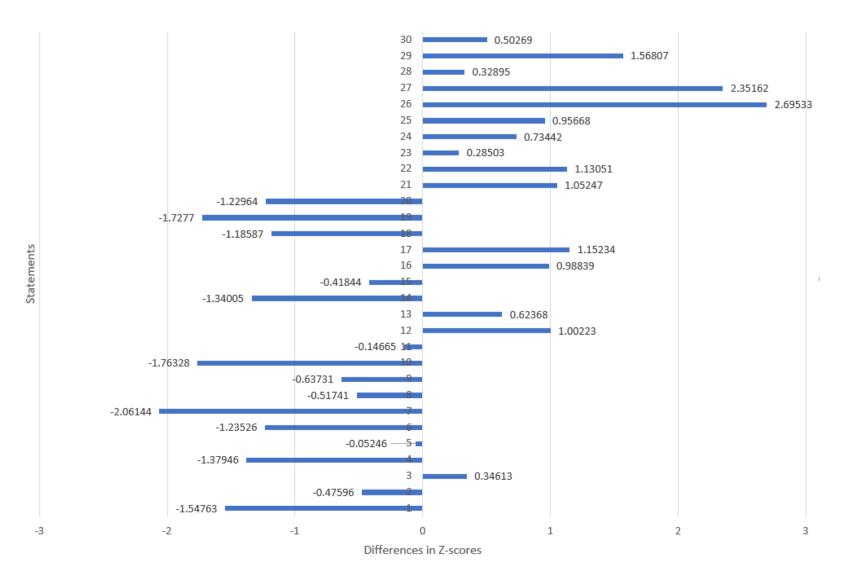
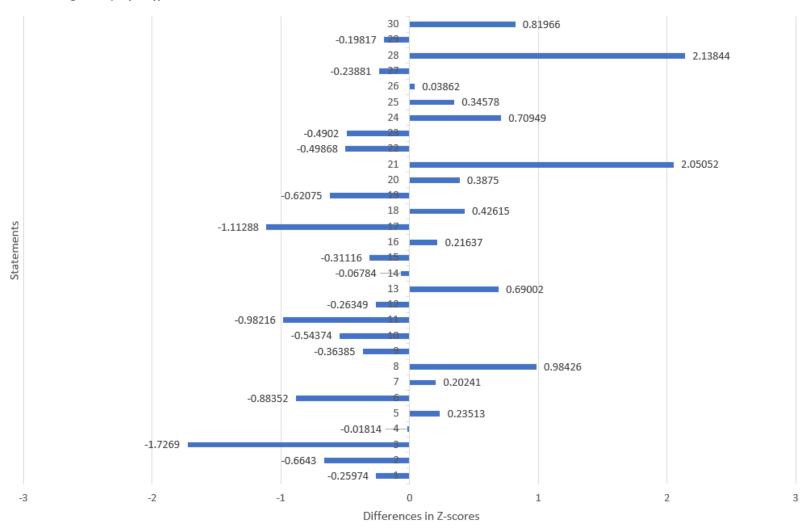


Table E6Descending Array of Differences Between Factor 2 and Factor 3



Appendix F

Institutional Review Board (IRB) Approval Letter



Jan 26, 2022 1:50:30 PM EST

Karen Larwin
Teacher Ed and Leadership St

Re: Exempt - Initial - 2022-93 Teacher Silence during Staff Meetings

Dear Dr. Karen Larwin:

Youngstown State University Human Subjects Review Board has rendered the decision below for Teacher Silence during Staff Meetings.

Decision: Exempt

Selected Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

Findings: Your research project "Teacher Silence During Staff Meetings" protocol (#2022-93) has been reviewed. This study seeks to administer a survey to educators to examine their experiences with silence during staff meetings. The consent letter has been provided and provides potential participants with a clear description, the risks, and their rights as a participant.

The research project meets the exempt definition of 45 CFR 46.101.2 (i). You may begin the investigation immediately. Please note that it is the responsibility of the principal investigator to report immediately to the YSU IRB any deviations from the protocol and/or any adverse events that occur.

Best wishes for the successful completion of your research.

Daniel J. Keown
Designated IRB Reviewer
Youngstown State University

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Youngstown State University Human Subjects Review Board