

RETENTION OF NOVICE TEACHERS ENROLLED IN A U.S. TEACHER DEVELOPMENT
PROGRAM

by

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Abstract

The influence of novice teachers' experiences with meeting the same standards as their veteran peers while trying to develop the pedagogical skills necessary for their roles also plays an effect in novice teachers' experience with occupational stress and burnout in their role. Together, these factors influence the teacher's decision to persist in the classroom or leave to pursue teaching in an affluent community or pursue other roles within and outside of the educational landscape. A needs assessment revealed that novice teachers at the U.S. Teachers Academy (USTA), a pseudonym used for the purpose of this study, who expressed higher self-efficacy and lower levels of burnout had increased desires to persist as teachers more than their peers. Thus, a 6-month intervention was designed and implemented to engage participants in a community of practice using the Balint Group model. The intervention comprised eight novice teachers, a psychoanalyst who served as the facilitator, and a USTA alumni who served as the co-facilitator for the group. A convergent mixed-method study was used. Findings revealed participants felt a strong sense of community and developed skills to have strong relationships with their students and peers which mitigated some stress; however, other administrative tasks in their roles contributed to burnout during the intervention. All participants expressed a desire to persist for the following academic year; however, most participants expressed desires to take on educational roles outside of the classroom in their future.

Keywords: teacher retention, persistence, self-efficacy, burnout, Balint Group, communities of practice, urban education

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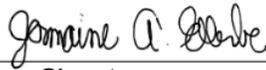
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Dedication

This dissertation is dedicated to my mother, Robin Williams, for her eternal love, dedication, and support. She will always be my number one fan and best friend.

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Table of Contents

Abstract.....	ii
Dedication.....	iv
Acknowledgements.....	v
List of Tables	xi
List of Figures.....	xii
Executive Summary	1
Problem of Practice.....	1
Synthesis of Relevant Research Literature	1
Novice teacher experience.	2
Occupational stress and burnout.	2
Self-efficacy.....	3
Intentions to persist.	3
Theoretical and Practical Frameworks.....	4
Research Purpose and Objective.....	5
Research Questions.....	6
Research Design.....	6
Intervention.	7
Data collection and analysis.....	7
Findings.....	10
Participant perception.	10
Adherence.	10
Change in self-efficacy.	11
Change in burnout.....	11
Change in intent to persist.....	11

Chapter 1: Introduction	13
Problem of Practice	15
Theoretical Framework	16
The microsystem	17
The mesosystem.....	17
The exosystem.	17
The macrosystem.	18
The chronosystem.	18
Review of the Literature	19
Novice teachers.....	19
Historical changes in education.	20
School and district characteristics.....	27
Teacher characteristics.....	32
Occupational stress.	40
Summary	45
Chapter 2: Needs Assessment.....	47
Context of the Study	47
Statement of Purpose	48
Needs Assessment Research Questions	48
Methodology	49
Participants.....	49
Instrumentation.	50
Data collection.	55
Findings.....	55
Initial summary of results.	55

Discussion	58
Limitations	60
Summary	61
Chapter 3: Interventions to Address Teacher Retention	62
Theoretical Framework	63
Practical Framework	68
Collective participation	69
Sustained duration	70
Active learning	71
Literature Review	71
Interventions that address organizational factors	71
Interventions that address teacher skill	79
Interventions that address teacher mindsets	80
Balint Groups Interaction with Proposed Practical Model	87
Conclusion	89
Chapter 4: Intervention and Methodology	91
Purpose of Study	91
Convergent Mixed-Method Research Design	93
Process evaluation	94
Outcome evaluation	96
Method	97
Participants	97
Measures and instrumentation	100
Procedure	105
Data collection	107

Data analysis	109
Researcher Subjectivity	111
Chapter 5: Findings and Discussion	114
Findings.....	114
Participant perception.	115
Adherence.	120
Change in self-efficacy.	127
Change in burnout.....	130
Change in intent to persist.....	134
Conclusions.....	139
Relationship to literature.....	139
Relationship to theoretical framework.....	141
Discussion.....	143
Strengths and limitations.....	143
Implications for practice and research.	146
References.....	149
Appendix A: Survey Questions from Needs Assessment.....	177
Appendix B: Needs Assessment Recruitment Email.....	183
Appendix C: Needs Assessment Consent Form	184
Appendix D: “Source of Pressure You Face in Your Job” Subscale.....	186
Appendix E: Dimensions of Burnout as Assessed by the Maslach Burnout Inventory.....	187
Appendix F: Teacher Characteristics Subscales	188
Appendix G: Data Collection Matrix.....	189
Appendix H: Field Notes Template	192
Appendix I: Balint Group Meeting Reflection Form.....	194

Appendix J: Recruitment Email.....	201
Appendix K: Recruitment Blurbs	203
Appendix L: Recruitment Survey	204
Appendix M: Informed Consent Form	207
Appendix N: Pre- and Post-Test	212
Appendix O: Participant Email.....	230
Appendix P: Reflection Form Reminder Email.....	232
Appendix Q: Semi-Structured Focus Group Questions by Construct	233
Appendix R: Semi-Structured Interview	235
Appendix S: Focus Group Codebook	236
Appendix T: Follow-Up Email on Attendance.....	246
Appendix U: Homewood Institutional Review Board Approval Letter	247
Appendix V: Site Approval Letter	249
Biographical Information.....	250

List of Tables

Table 1. Correlations Between 10 Themes of the Novice Teacher Experience and Occupational Stress	44
Table 2. Self-Reported Persistence in the Classroom.....	56
Table 3. Average Responses by Subscales of Participant’s Sources of Pressure and Burnout.....	57
Table 4. Average Use of Various Coping Strategies by Participants	57
Table 5. Demographic Information by Participant	98
Table 6. Data Collection Timeline.....	109
Table 7. Participant Responsiveness to Balint Group Meeting Overtime	116
Table 8. Participant Perception of Adherence overtime	121
Table 9. Participant Engagement in Balint Group Meetings	124
Table 10. Change in Self-Efficacy by Domain.....	129
Table 11. Change in Participant’s Self-Reported Burnout by Domain	131
Table 12. Change in Participant’s Self-Proclaimed Intent to Persist.....	136
Table 13. Future Career Interests.....	138

List of Figures

Figure 1. Bronfenbrenner’s ecological systems theory applied to novice teachers.	19
Figure 2. Experiential cycle of the first-year teacher.	20
Figure 3. Conceptual framework of factors influencing novice teacher retention.	45
Figure 4. Researcher’s proximal representation of theoretical framework.	65
Figure 5. Connection between theoretical and practical frameworks.	68
Figure 6. Conceptual model of intervention’s potential influence on outcomes.	92

Executive Summary

This researcher focused on supporting novice teachers enrolled in a teacher preparation program with their experiences of occupational stress to increase their intentions to persist in the classroom beyond their 2-year commitment. For this study, the researcher implemented a 6-month intervention based on a practice commonly used with general practitioners in response to occupational stress and compassion fatigue called Balint Groups. This mixed-methods study researcher investigated the relationship between participation in the Balint Group meetings and changes in the novice teachers' self-efficacy, burnout, and intentions to persist in the classroom.

Problem of Practice

U.S. teacher shortages have more than tripled since the 2012 to 2013 school year to a shortage of over 110,000 teachers (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Researchers have defined a teacher shortage as an insufficient number of certified teachers to fill vacancies (García & Weiss, 2019). Difficulties with retaining staff contributes to the problem (García & Weiss, 2019). At the conclusion of the 2011 to 2012 school year, 13.8% of public-school teachers left their position (Goldring, Taie, & Riddles, 2014). These positions are filled with novice teachers. As novice teachers enter the profession, they not only lack experience but also enter positions with limited resources or support (Gordon, 1991). Ingersoll (2004) called this cycle of attrition the “revolving door effect” (p. 20). As these educators leave their roles, many attribute occupational stress as a main contributing factor. At the conclusion of the 2012 to 2013 school year, approximately 51% of the public-school teachers who left their roles cited the unmanageability of their roles as the primary factor (Goldring et al., 2014).

Synthesis of Relevant Research Literature

This section reviews literature relevant to the intervention study and constructs.

Novice teacher experience. A novice teacher refers to a teacher with less than five years of teaching experience (Ingersoll, 2001). Ingersoll and Merrill (2012) noted that 41% of teachers left their roles within their first five year of employment; thus, there was a constant influx of novice teachers entering education. These novice teachers face the challenge of meeting high-performance standards and performing instructional or managerial tasks at the level of their veteran peers while learning their new roles (Corcoran, 1981; Lortie, 2002; Olson & Osborne, 1991). Novice teachers have all of the responsibilities of the role while learning the related expectations (Lortie, 2002). Olson and Osborne (1991) explored the experiences of first-year teachers and identified 10 themes prevalent among the experiences of novice teachers. These 10 themes show the causes of occupational stress identified by Anbazhagan and Rajan (2013).

Occupational stress and burnout. Occupational stress is the accumulation of work-related stressors overtime (R. R. Ross & Altmaier, 1994). It occurs when an individual perceives that the demands of a job outweigh the resources available (Pepe & Addimando, 2013). Anbazhagan and Rajan (2013) identified role, job, and physical factors as contributing factors to occupational stress. This stress includes role ambiguity, feelings of inadequacy, difficulties with performance in their roles, beliefs around inadequate compensation, and fear of not meeting job expectation. All the factors contributing to occupational stress align with the experience of a novice teacher outlined by Olson and Osborne (1991).

Overtime, occupational stressors can lead to burnout or total emotional exhaustion (Brock & Grady, 2000). Forty percent of teachers experience burnout at some point in their teaching career (Brock & Grady, 2000). Burnout can be broken into three domains: depersonalization, reduced personal accomplishment, and emotional exhaustion (Horn & Schaufeli, 1998). Depersonalization is when a teacher exhibits negative attitudes toward or avoids building

relationships with students and colleagues (Brock & Grady, 2000). Emotional exhaustion is when a teacher experiences a depletion of emotional energy (Brock & Grady, 2000). Reduced personal accomplishment is when a teacher perceives that they are ineffective at their roles or lack self-efficacy (Brock & Grady, 2000).

Self-efficacy. Self-efficacy is the belief that one is competent and can fulfill their roles (Milner, 2002). Bandura (1977) theorized four main influences on self-efficacy—mastery experiences, verbal persuasion, vicarious experiences, and physiological arousal. Mastery experiences are the successful performances from the past that impact an individual's perception of their abilities to accomplish tasks associated with their role (Bandura, 1977). Verbal persuasions are the messages individuals receive about their performance from others (Bandura, 1977; Tschannen-Moran & Hoy, 2007). Vicarious experiences are when an individual sees someone else be successful in their performance (Bandura, 1977; Tschannen-Moran & Hoy, 2007). Finally, psychological and emotional arousal is the feeling of joy a teacher gets from teaching. Researchers have found that a teacher's self-efficacy is positively correlated with their job satisfaction (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012; Johnson & Birkeland, 2003; T. M. Smith & Ingersoll, 2004; Stockard & Lehman, 2004). Additionally, having high self-efficacy is negatively correlated with occupational stress (Brouwers & Tomic, 1999).

Intentions to persist. These factors all influence a teacher's decision to persist or leave the classroom. Because this intervention was for 6-month of the academic year, the researcher could not use long-term retention data. The researcher relied on what participants shared as their intentions to persist in the classroom beyond five years.

Outside of the factors listed above, previous research reveals several external factors that influence teacher retention including historical and political factors. These factors include the implementation of federal mandates that place pressure on schools and teachers to achieve high academic outcomes (Hill & Barth, 2004). More immediate factors, such as compensation (Theobald, 1990), teacher demographics (Ingersoll & Strong, 2011), and school culture (Hughes, 2012), have previously been explored in relation to teacher retention. Some researchers have also suggested that it is the individual teacher's interpretation of the environment that leads to their feeling of job-dissatisfaction or stress, motivating a teacher's decision to persist or leave their roles (Olson & Osborne, 1991). Thus, teacher self-efficacy (Johnson & Birkeland, 2003) and experience with occupational stress (RR Ross & Altmaier, 1994) were previously explored in relation to teacher retention.

Theoretical and Practical Frameworks

This researcher used both a theoretical and practical framework. The theoretical framework centered on Vygotsky's (1979) sociocultural theory. This theoretical framework was chosen because professional development situated in the sociocultural theory was most likely to increase teacher self-efficacy, which was a major construct explored in this study. Sociocultural theorists have added that access to learning occurs through the help of peers within the same field, collaborating toward a common goal (Raphael, Vasquez, Fortune, Gavelek, & Au, 2014). Thus, professional development opportunities should provide teachers with opportunities to practice inquiry and problem solving with small groups of colleagues and through this process, learning occurs (Raphael et al., 2014). Lave and Wenger (1991) referred to this concept as a community of practice (CoP). CoPs require collaboration and engagement that allows learning to develop through legitimate peripheral participation or the process by which a novice practitioner

enters the CoP as an active participant who engage in low-risk tasks but through peripheral activities becomes more knowledgeable and experienced. This finding also aligns with research on strengthening self-efficacy (Bandura, 1977).

Additionally, this researcher used a practical framework, which allowed the researcher to combine theoretical perspectives and practitioner explanations (see Lester, 2005). Because the intervention was intended as a professional development opportunity for novice teachers, the researcher used a practical framework developed by Desimone and Garet (2015) that provided a model for strong professional development rooted in the sociocultural theory. This model included five features necessary for effective professional development opportunities: (a) content focus, (b) active learning, (c) coherence, (d) sustained duration, and (e) collective participation.

Research Purpose and Objective

The purpose of this study was to examine the influence of participation in a 6-month Balint Group experience on a novice teacher's self-efficacy, experience with burnout, and intentions to persist in the classroom. The researcher also examined the process of the intervention with two process evaluations. The researcher expands current research on Balint Group practices and potential supports for novice teachers experiencing occupational stress. This study centered on a teacher preparation program located in a southern-metropolitan region of the United States. The organization was referred to using the pseudonym U.S. Teacher's Academy (USTA). USTA recruits individuals to commit to teaching in low-income communities for two years in exchange for tuition reimbursement assistance. The organization had experienced challenges with teacher persistence, specifically with participants who persisted beyond their 2-year commitments. This researcher engaged a group of USTA participants in a study designed to

examine change in their self-efficacy, burnout, and intentions to persist during the 6-month Balint Group intervention.

Research Questions

This study was guided by the following research questions:

RQ1: How did participants perceive their experience engaging in a 6-month Balint Group?

RQ2: How did the study implementation adhere to or differ from the proposed implementation procedures?

RQ3: How did participation in a 6-month Balint Group experience change novice-teacher self-efficacy along the three domains: (a) efficacy in classroom management, (b) efficacy in instructional strategies, and (c) efficacy in student engagement?

RQ4: How did participation in a 6-month Balint Groups change participants' level of burnout across the three domains: emotional exhaustion, depersonalization, and low personal accomplishment?

RQ5: What was the difference in teacher self-expressed intent to persist in the classroom before and after participating in the Balint Group intervention?

Research Design

This researcher used a convergent mixed-method approach (see Creswell & Plano Clark, 2018). Each of the research questions was explored with a corresponding qualitative and quantitative dataset. The data were collected simultaneously throughout the intervention. The researcher then analyzed the findings separately and compared the findings for similarities and differences. Finally, the researcher used the combined analysis of the qualitative and quantitative data to draw trends and themes in response to the research questions.

Intervention. The intervention occurred over a 6-month period from December to May of the 2020 to 2021 academic year. The intervention consisted of five monthly virtual Balint Group meetings. Balint Groups were a therapeutic practice used to support general practitioners with burnout and compassion fatigue. In the intervention, eight novice teachers met for monthly 90-minute virtual meetings with a psychoanalyst and a co-facilitator who was a former participant in the teacher preparation program. During each Balint Group meeting, two participants could share an interpersonal challenge they were experiencing in their work. For 45 minutes, the group explored the challenge using the following protocol:

- Exposition: one practitioner shares a relationship problem that they are facing with a student, parent, or colleague.
- Questions: members of the group pose questions to the practitioner who shared.
- Fantasy: while the individual who shared is silent, other members of the group talk through the other perspectives the individual may not see or could be ignoring.
- Protagonist Statement: the sharer summarizes what they heard and shares a clear commitment they will make to resolve their issue.

Data collection and analysis. This section provides an overview of the quantitative and qualitative data and how these were analyzed to explore the research questions.

Quantitative data. The quantitative data examined in this study included a pre- and post-test and monthly reflections forms that were collected at the conclusion of each Balint Group meeting. The pre-test was collected before the start of the intervention and the post-test was collected at the conclusion of the final Balint Group meeting. Measurements on the pre- and post-test included the Maslach Burnout Inventory (Horn & Schaufeli, 1998) and the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001). Both instruments used Likert-type scale

questions. Intentions to persist were measured with closed-ended questions that asked participants if they planned to fulfill their 2-year commitment, teach beyond two years, and teach beyond five years. Additionally, a closed-ended question asked participants their long-term career goals, with the options of lifetime teacher, educational roles outside of the classroom, and roles outside of education.

Participants received the reflection forms via email at the conclusion of each Balint Group meeting. The reflection forms were used to evaluate the two process evaluation questions on participant responsiveness and adherence. The reflection form derived from the American Balint Society's Leader Evaluation and consisted of a series of 5-point Likert scale questions indicating how strongly participants felt about their participation in that month's Balint Group meeting. Due to the small sample size of this study, both the reflection form and pre- and post-test were analyzed using descriptive statistics. The researcher analyzed the mean and mode scores for each participant for each question and used a t test to analyze the significance of change in the outcome constructs from pre to post-test.

Qualitative data. The qualitative data used within this study included (a) a semi-structured focus group, (b) field notes shared from the co-facilitator and psychoanalyst, (c) semi-structured debriefs with the co-facilitator and psychoanalyst, (d) open-ended questions on the pre- and post-test and reflection forms, and (e) semi-structured interviews with three participants that served as a form of member checking. The pre-and post-test included one open-ended question that allowed participants to elaborate on their long-term career plans. The open-ended question on the reflection form allowed participants to elaborate on their responsiveness to the Balint Group experience.

During each Balint Group meeting, the psychoanalyst and co-facilitator kept notes during the Balint Group meetings using a notes template provided to them by the researcher. The field notes were shared with the researcher at the conclusion of each Balint Group meeting. The field notes were used as a qualitative measurement of adherence. The researcher reviewed the field notes and recorded any discrepancies between the intended structure of the Balint Groups and what occurred. Additionally, the researcher met with the psychoanalyst and co-facilitator following every Balint Group meeting for semi-structured debrief to review any discrepancies in the adherence to the plan for the intervention. These debriefs served as a form of credibility strengthening strategy (Creswell & Miller, 2000).

Following the intervention, the semi-structured focus group was held with all participants in June 2021 and allowed participants to elaborate on their experience with burnout, self-efficacy, their responsiveness to the intervention, and their career intentions. The focus group was transcribed using Otter.ai. The researcher reviewed the transcription of the focus group and the qualitative data from the open-ended questions on the reflection forms and pre- and post-tests separately. The researcher used a jotting strategy (Miles, Huberman, & Saldana, 2014) for each measurement following by a descriptive coding process. Next, the researcher categorized the data by research construct and identified emergent themes.

Once all the qualitative and quantitative data were examined, the researcher combined the findings to determine trends and themes as they pertained to the research questions. Finally, the summary of data was shared with three of the participants as a form of member checking. These participants engaged in semi-structured interviews to provide additional participant voice to the analysis of data.

Findings

This section explores the findings from the study organized by process and evaluation constructs.

Participant perception. The quantitative data from the reflection forms illustrated that participants' trust in one another increased throughout the intervention along with their perception of the meeting being a non-judgmental climate. Qualitative data from the focus group aligned with these findings. Participants shared that they felt understood, affirmed, and like a part of a community. Additionally, participants shared that through the Balint Group experience, they could deepen their understandings of other's perspectives and increased their abilities to build strong relationships with students and colleagues. The ability to build strong relationships was a strength of this study as positive relationships correlate with a decrease in occupational stress. Additionally, given the study occurred during a pandemic, although individuals worked virtually, the ability to build strong, positive relationships was a strength. Overall, participant perception of the intervention was positive, and many expressed interests in participating in the experience for the 2021 to 2022 academic year.

Adherence. The field notes and semi-structured debriefs with the facilitators revealed that the structure of the Balint Group meetings was consistent; however, some challenges emerged including participant attendance and engagement. Quantitative data from the reflection forms aligned with this finding. Facilitators shared participants were sometimes off camera or had distractions in the home. Additionally, weather conditions led to some challenges with the Internet, leading to the cancelation of the February Balint Group meeting. As a result, the intervention, which was originally intended to include six monthly meetings, was decreased to five meetings.

The reflection forms revealed that over time, teachers' abilities to provide suggestions or identify areas where they could take action to influence change increased. The focus group data aligned with this finding. Participants revealed that they initially believed the Balint Group meetings would be about receiving suggestions for action they could take in the classroom that would improve their students' performances; however, they realized it was about understanding the perspectives of others.

Change in self-efficacy. The quantitative data from the pre- and post-test indicated that the participants' self-efficacy decreased overtime in two of the domains: class management and student engagement. However, their perceptions of their efficacy in instructional strategies increased. During the focus group, participants believed their relationships with students and their understanding of their locus of control also improved because of the intervention.

Change in burnout. Based on the analysis of data from the pre- and post-test, participants' experiences with burnout increased across all three domains during the 6-month experience. During the semi-structured focus group, teachers felt more stressed throughout the school year and identified several factors that contributed to their feelings of burnout. These factors included administrative pressures, systematic pressures, social perceptions of education, a desire for recognition, need for additional support, limited time restraints, and lack of work-life balance.

Change in intent to persist. The data on the post-test aligned with that of the pre-test for all three of the closed-ended questions around intentions to persist for two years, three to five years, and five years or more. During the focus group, most participants shared a desire to pursue a role in education outside of the classroom except for one participant who expressed a desire to

be a lifetime teacher. This participant contributed the change from her desire to leave the classroom at the beginning of the intervention to her participation in the intervention.

Chapter 1: Introduction

In the 2017 to 2018 academic year, there were 3.5 million public school teachers in the United States (U.S. Department of Education, 2019). Each year, in America, 21% of teachers in urban school systems leave the classroom (Alliance for Excellent Education, 2014).

Approximately 41% of teachers leave the classroom within the first five years of their roles (Ingersoll & Merrill, 2012). The turnover rate is higher in low-income communities than affluent ones (Ingersoll & Merrill, 2012). When teachers transfer to new districts, they leave schools in low-income communities for more affluent environments (He, Cooper, & Tangredi, 2015). Ingersoll (2004) defined this issue as the revolving door effect, causing low-income communities to replenish their teaching staff continuously. Thus, the effects of teacher attrition disproportionately affect low-income communities of color because inexperienced teachers are most often placed in urban and rural schools (Ingersoll & Merrill, 2012), making teacher attrition a problem of not only quality but also equity (Ronfeldt, Loeb, & Wyckoff, 2013).

The retention of novice teachers, or teachers with less than five years of teaching experience (Ingersoll, 2001), is a pressing issue for administrators since novice teacher attrition correlates with student achievement and school budget (Hanushek & Rivkin, 2007; Herman, Hickmon-Rosa, & Reinke, 2018; Levy, Joy, Ellis, Jablonski, & Karelitz, 2012; Oberle & Schonert-Reichl, 2016). Teacher turnover has an impact on student performance on standardized tests (Ronfeldt et al., 2013). When teachers leave the classroom, their roles are filled by another novice teacher (Ingersoll, 2004). When examining student academic performance, novice teachers tend to perform poorly compared to their veteran peers (Barnes, Crowe, & Schaefer, 2007). Furthermore, novice teachers are often placed in challenging contexts with limited resources and support (Gordon, 1991). Teacher turnover costs over two billion dollars annually

in America (Alliance for Excellent Education, 2014). Additionally, recruiting, hiring, and training the new teacher costs approximately \$14,500 per leaver per school year (Synar & Maiden, 2012).

Contributing factors to novice teacher retention include historical and political factors (Cohen-Vogel, 2005). The implementation of the No Child Left Behind Act (NCLB) in the United States placed pressure on schools and teachers to achieve high academic outcomes (Hill & Barth, 2004). NCLB is a federal law enacted in 2002 as an update to the Elementary and Secondary Education Act (ESSA, n.d.; Klein, 2015). The act enables low-income schools to receive extra financial assistance in exchange for improvements in academic progress (Klein, 2015). NCLB was followed in 2015 by the Every Student Succeeds Act (ESSA) which required that all students in America be taught to high academic standards and statewide assessments measure student progress toward those rigorous standards (Every Student Succeeds Act, n.d.). Novice teachers traditionally have lower student achievement outcomes than their veteran peers (Rockoff, 2004). In response to the trend in data, an increasing focus has been placed on research to determine how to retain teachers in the classroom (Rockoff, 2004).

The research findings also suggest more immediate factors and the teacher's interaction with their external environment centering around organizational factors like compensation (Theobald, 1990), demographics (Ingersoll & Strong, 2011), and culture (Hughes, 2012) impacts the teacher's retention or commitment to the educational field. The researchers have also acknowledged the internal processing of teachers' experiences (Olson & Osborne, 1991). Examining a teacher's demographics (Kirby, Grissmer, & Hudson, 1991), personality (Lortie, 2002), self-efficacy (Johnson & Birkeland, 2003), and experience with occupational stress and

how it correlates with retention (R. R. Ross & Altmaier, 1994) has also grounded previous research.

The context of this research was a novice teacher pre-service program that worked with urban schoolteachers in their first two years in the classroom. The program was referred to by the pseudonym U.S. Teacher's Academy (USTA). USTA is a nonprofit organization that recruits and trains novice teachers who, in exchange, commit to teaching for two years in a low-income community. This study will focus specifically on novice teachers in one of USTA's southern metropolitan regions.

USTA's mission centers on supporting underserved communities. According to Cho and Tozer (2008), research on underserved communities often utilizes urban to characterize public schools with high percentages of minority and low-income students. In line with the research literature, this researcher used the term urban to refer to schools that are high minority (Ingersoll, May, & Collins, 2019), low income (DeAngelis & Presley, 2011), and underachieving (Marinell & Coca, 2013).

Problem of Practice

The teaching shortage in the United States is a complex and rapidly increasing problem. Since the 2012 to 2013 school year, the nation's teacher shortage has tripled to a shortage of over 110,000 teachers (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). A shortage occurs because there are insufficient teachers to fill vacancies (García & Weiss, 2019). Coupled with the lack of applicable candidates, difficulties with retaining staff have continued to exasperate the problem (García & Weiss, 2019). After the 2011 to 2012 school year, 13.8% of public-school teachers left their position or the teaching profession (Goldring, Taie, & Riddles, 2014). This number is higher in urban and low-income communities (Ronfeldt et al., 2013). As these

educators leave their roles, their positions are traditionally filled with novice teachers who, coupled with a lack of experience, enter the most challenging positions with limited resources or support (Gordon, 1991). A cycle of attrition develops (Ingersoll, 2004). Novice teachers are hired, pressured to achieve strong results, leave the profession, and replace novice teachers. In the 2015 to 2016 school year, 4.7% of the teaching force were newly hired teachers in their first year of teaching, which was a .7% increase from the 2011 to 2012 school year when 20.3% of the teaching force were novice teachers (less than five years of experience; García & Weiss, 2019). By March of the 2018 to 2019 school year, 19.5% of USTA's 3,500 teachers left the organization (C. Chambers, personal communication, January 12, 2019). At the end of the 2018 to 2019 school year, most of these teachers cited stress or mental health as their primary factor for leaving (C. Chambers, personal communication, January 12, 2019); this aligns with national data. Approximately 51% of the public-school teachers who left their roles in the 2012 to 2013 school year cited the unmanageability of their role as the primary factor (Goldring et al., 2014).

Theoretical Framework

The ecological systems theory (EST; Bronfenbrenner, 1976) is a theoretical framework that helps organize the multiple, intersecting factors that influence an individual. One should consider EST when evaluating the attrition of novice teachers in urban schools, the impact on the environment, and the individuals within that environment to show how each plays in an individual's orientation to said environment. According to the EST, an individual develops within a larger ecosystem environment of concentric settings (Bronfenbrenner, 1976). The individual at the center of this ecosystem is called the focal individual. The focal individual is in the center of the ecosystem and is impacted by the microsystem, mesosystem, exosystem,

macrosystem, and chronosystem (Bronfenbrenner, 1976). For this review, the focal individuals are novice teachers.

The microsystem. The focal individual's immediate environment, such as their family, friends, community, or school, comprises the microsystem. Microsystems are the interpersonal relationships that most influence the individual's growth and development (Bronfenbrenner, 1976). For example, a novice teacher's relationship with their parents can influence their perception of society, themselves, their students, and larger systems. The teacher's relationship with their colleagues and administrators could also impact their persistence (Hughes, 2012; J. L. Taylor, 2013)

The mesosystem. Mesosystem refers to the interaction between various settings or stages in life that impact an individual's development (Bronfenbrenner, 1976). In other words, the interaction between the focal individual's microsystems, such as the interactions between their family and friend groups, is the mesosystem (Bronfenbrenner, 1976). In the case of a novice teacher, this can be the relationship between home and work or their personal experiences as a K-12 student and their experience as a teacher. The interaction between a novice teacher's family and their colleagues can impact the individual's home and work environment; thus, influencing their development as a teacher.

The exosystem. The microsystems and mesosystems are nested within the exosystem. Exosystems are environments in which the focal individual does not directly participate but impacts the individual's development (Bronfenbrenner, 1976). The exosystems include the school or community, the government, or even the media (Bronfenbrenner, 1976). The exosystem may include district and school policies, campus cultural and structural conditions, and quality or quantity of resources when thinking about novice teacher development.

The macrosystem. Macrosystems are composed of societal beliefs and norms (Bronfenbrenner, 1976). According to Bronfenbrenner (1976), most institutions have similar macrosystems because society is grounded in the same ideologies. Thus, most schools follow the same traditional views of learning and teaching (Bronfenbrenner, 1976). The perception of teaching and USTA in society is a major macrosystem factor influencing the retention of USTA participants (Heineke, Mazza, & Tichnor-Wagner, 2014; Straubhaar & Gottfried, 2016).

The chronosystem. Lastly, the chronosystem refers to the changes in systems over time (Bronfenbrenner, 1976). Within the context of this literature review, the chronosystems can be the change in teacher certification requirements over time (Allen, 2005) or national policy trends, like the No Child Left Behind Act.

This researcher used the EST to organize the numerous factors that contribute to inequitable school systems and illuminate the factors surrounding novice teachers' retention. All of the factors examined in the nested systems influence the novice teacher's decisions and their perceptions of and experience within their role, influencing their decisions around where they work, how long they persist in education, and their development (DeAngelis & Presley, 2011). Additionally, EST frames the analysis of the reciprocal relationship between novice teachers and their various social contexts (Figure 1).

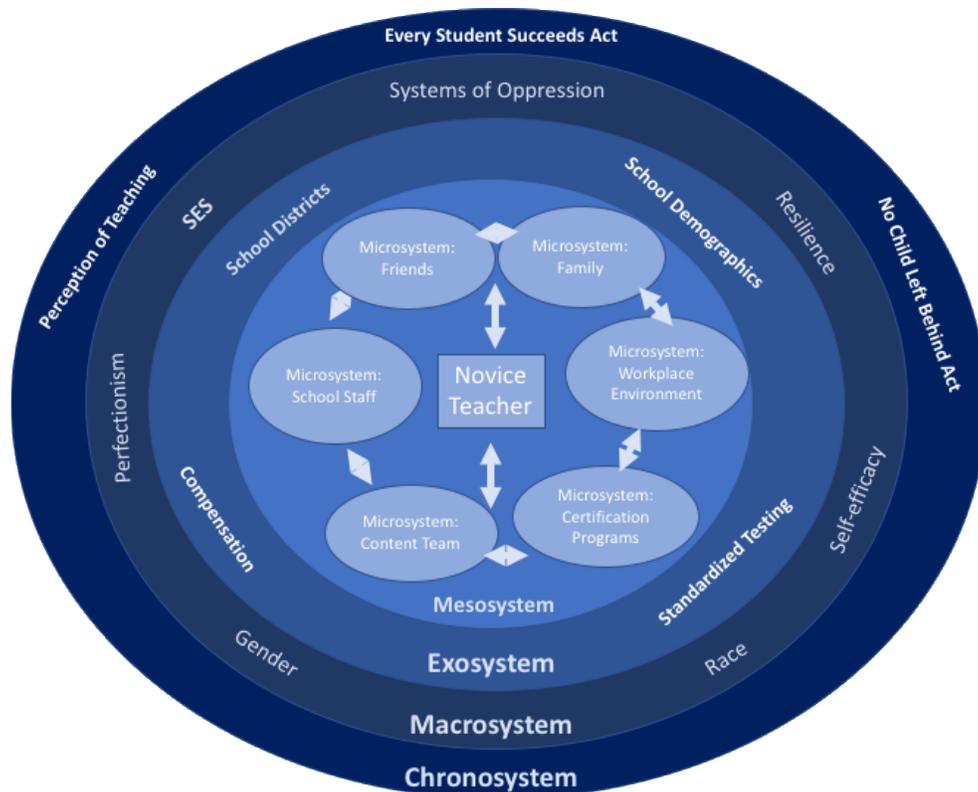


Figure 1. Bronfenbrenner's ecological systems theory applied to novice teachers.

Review of the Literature

This literature review examines the factors related to novice teacher attrition. This review will focus on novice teachers in their first and second years of teaching, which parallels the novice teachers who are a part of the USTA program.

Novice teachers. At the center of EST is the focal individual. In this case, that individual would be a novice teacher enrolled in USTA. The organization recruits individuals to teach for two years; thus, for this study, novice teachers were teachers with fewer than two years of experience as the lead teacher of a classroom (see Barrett et al., 2002). A lead teacher handles a student's learning in alignment with performance measures (Jewell & Hallgren, 2015).

Novice teachers face the challenge of meeting high-performance standards while simultaneously learning their roles (Corcoran, 1981; Lortie, 2002; Olson & Osborne, 1991). Olson and Osborne (1991) conducted a phenomenological study to analyze the process of

learning to teach for first-year teachers. The researchers asked four novice teachers in a Canadian urban school district to journal their experience in their first year. The researchers conducted interviews and identified 10 themes prevalent among the experiences of novice teachers: (a) initial job orientation, (b) sense of responsibility, (c) concern about their ability to meet job expectations, (d) sense of control, (e) desire for affiliation, (f) security, (g) balance between content and processing, (h) goal achievement, (i) search for understanding their role, and (j) changes in role orientation (Olson & Osborne, 1991). Figure 2 illustrates the relationship between the 10 themes as they influence novice teachers' experiences. These themes emerge during the critical point in a teacher's career where they assume all of the role's responsibilities while also learning the related expectations (Lortie, 2002). Moreover, novice teachers are expected to perform instructional and managerial tasks at the level of their veteran peers without the benefit of the same amount of experience (Corcoran, 1981).

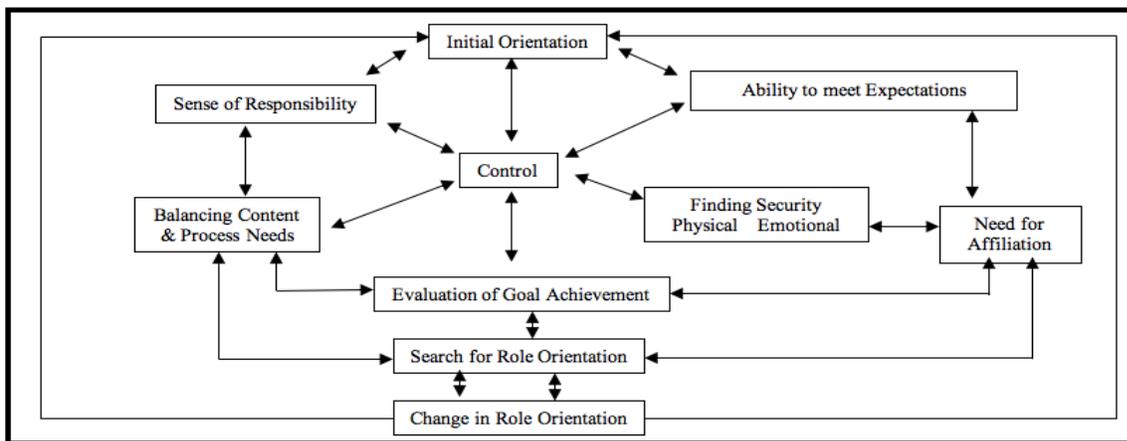


Figure 2. Experiential cycle of the first-year teacher. Note. Representation of the first-year experiential cycle developed by *Learning to teach: The first year*, by M. R. Olson & J. W. Osborne, 1991, p. 331. In public domain.

Historical changes in education. Recruiting and retaining teachers in an urban school is a challenge rooted in a larger historical and socio-cultural context, thus situated within the chronosystems and macrosystem (Bronfenbrenner, 1976). In 1966, Coleman et al. examined the

quality of education across the United States and concluded that students in urban communities were marginalized and receiving an inequitable education. The report revealed that schools with predominately minority demographics had limited resources, low teacher retention, and low teacher and school quality (Coleman et al., 1966).

Over a century later, the same findings hold (Gamoran & Long, 2007). In the 1980s, the National Commission on Excellence in Education (1983) published *A Nation at Risk*, a report on the nation's schools. The report inspired standardization and accountability measures to fix public schools (Mehta, 2013). Gamoran and Long (2007) discussed this resegregation of schools in the 1990s using gerrymandering and White flight to the suburbs in their work and note its contribution to the consistency in Coleman et al.'s (1966) findings.

Working in a school with limited funding and resources presents significant challenges for a novice educator. Teachers face meeting the same student achievement results as their peers in more affluent environments with more resources (Lortie, 2002). Moreover, their classrooms are impacted by the other systemic factors influencing their students, such as lack of quality mental and physical health care, potentially low parent involvement due to occupational duties, and lack of healthy food options, to name a few. The challenges of their students become vicarious trauma and stress for the teachers in those communities (National Council of State Education Associations, 2019).

Perception of teaching as an occupation. Societal views of the purpose of education have changed over time, contributing to political reforms and changes in the role of a teacher (Cooper & Travers, 2012). For example, after World War II, there were larger students in schools and a rise in the birth rate (Ranson, Taylor, & Brighthouse, 1986). As more students became in school, the need for more teachers increased, and the expectations placed on schools

increased (Ranson et al., 1986). The increased focus was placed on the evaluation of students' preparedness to enter the workforce. In 1964, when the birth rates fell, the number of students in schools decreased, causing a reduction in governmental funding given to schools (Ranson, 2018). Lack of funding contributed to schools' inability to purchase resources (Ranson et al., 1986). Baugh and Stone (1982) looked at changes in the demand for teachers from 1980 to 2000. The study found the most decline in the late 1980s, which correlated with wage trends decreasing. Over time, society's needs have impacted education changes, thus impacting the role of teachers and school leaders' abilities to retain educators (Cooper & Travers, 2012).

Societal beliefs and the norms that regulate a culture make up the macrosystem of an individual's environment (Bronfenbrenner, 1976). The perception of teaching in society has changed over time, contributing to an individual's environment and changes within the profession (Ranjard, 1984). Teachers may feel persecuted due to the societal judgment and opinions of the profession (Ranjard, 1984). Over time, society and politicians have blamed teachers for the challenges within the educational system (Cooper & Travers, 2012). Teachers can feel psychologically handicapped by society's perception of their roles and the value of their occupation (Nenty, Moyo, & Phuti, 2015).

Even though teaching was once considered the essential occupation in the United States (Nenty et al., 2015), other professionals educated by teachers are now considered to have higher societal status (Tau, 2014). Thus, the teaching profession has lost the respect it once held (Nenty et al., 2015). Society's negative views of the merit of teaching as a career reduced the investment or persistence teachers and teacher trainees had in their occupation (Nenty, Johnson Nenty, Fiji, & Sello, 2017). Some teachers only view teaching as a short-term occupation and never plan an entire career in teaching (Guarino, Santibañez, & Daley, 2006; Johnson & Birkeland, 2003).

Nenty et al. (2015) surveyed 73 education students at the University of Botswana to determine the perception of teaching as a profession. The researchers concluded that the students' perception of teaching as a profession positively correlated with the motivation to do well in their roles and their willingness to teach (Nenty et al., 2015).

Heineke et al. (2014) surveyed novice teachers enrolled in a 2-year teacher preparation program who made plans to leave the classroom after their 2-year commitment. The findings suggest that most respondents who had plans to leave originally intended to stay in the classroom for only two years and then leave for graduate school (Heineke et al., 2014). Heineke et al. (2014) and Straubhaar and Gottfried (2016) suggested that the Teach for America members interviewed did not view teaching as a prestigious career. Instead, participants saw the opportunity as a form of community service (Heineke et al., 2014).

Legislation. Although perceptions of the teaching profession have influenced change (Ranjard, 1984), legislation and educational policies have dictated change; thus, causing changes in the educational system over time (Bronfenbrenner, 1976). Over time, the federal government has increased its role in education (Cohen-Vogel, 2005). The role of a teacher has changed over time in correlation with educational policies (Hill & Barth, 2004). The pressures associated with the job have also changed as the requirements and standards placed upon teachers have evolved (Hill & Barth, 2004).

In recent years, the Every Student Succeeds Act of 2015 has reauthorized the ESSA (n.d.) of 1965. The goal of both acts was to ensure that minority students had equal opportunities for achievement as their peers (Hill & Barth, 2004). The implementation of a new policy, like ESSA, often changes the expectations placed on teachers (Cooper & Travers, 2012). Many teachers lack the knowledge or skill to adapt to the changes (Cooper & Travers, 2012).

The NCLB of 2002 stipulated that teaching quality had the most significant impact on student academic achievement (Kaplan & Owings, 2003). This belief was supported by Darling-Hammond (1997) and Darling-Hammond and Youngs (2002). Thus, the policymakers outlined new qualifications for highly effective teachers (Jerald & Ingersoll, 2002). The act required teachers to have state certification, a bachelor's degree, and considerable subject knowledge (Hill & Barth, 2004). However, many teachers teach subjects outside of what they studied in university, thus violating the policy (Jerald & Ingersoll, 2002). Moreover, the implementation of the NCLB opened the possibility for alternative certification programs because individuals with subject knowledge but no pedagogical knowledge under the policy were considered highly effective teachers (Darling-Hammond & Youngs, 2002). Some researchers have believed that this implementation has decreased the quality of the teaching field and negatively impacted society's perception of teaching as a profession (Darling-Hammond & Youngs, 2002).

Based on NCLB and ESSA, teacher quality is measured by student performance on high-stakes exams (Hill & Barth, 2004), requiring that 100% of students score 'proficient' on state tests (Rose, 2003). This requirement is an unrealistic goal (Darling-Hammond, 1997; Mathews, 2003). Teachers have expressed that measuring their success on one standardized test does not paint the complete picture of their work ("The law: What it is, and isn't," 2003) and does not place accountability on other stakeholders (Milloy et al., 2003). The high-stakes testing hurts teacher retention because of the stress experienced by teachers in response to the pressures for students to perform on the exams (Hill & Barth, 2004).

Standardized testing. High-stakes testing has a negative correlation with teacher retention (Hill & Barth, 2004). Teachers who have left the profession cite the school and district's pressure surrounding state-mandated testing as a primary motivation (Justice, Greiner,

& Anderson, 2003). Sass, Flores, Claeys, and Pérez (2012) sought to understand the differences between teacher retention during Texas's testing and non-testing eras. The researchers used state data sets of public-school teachers in Texas from 1988 to 2010 to identify teachers and schools that presented signs of high attrition (Sass et al., 2012). During the high stakes testing era, which included a more rigorous exam, teacher attrition rose based on Sass et al.'s (2012) analysis. The attrition of teachers during the high-stakes testing era was 24% greater than the low-stakes era based on Cox proportional hazard regression analyses (Sass et al., 2012). Moreover, as the rigor of the exam increased, teacher attrition also increased (Sass et al., 2012).

Shernoff, Mehta, Atkins, Torf, and Spencer (2011) concluded similar findings surrounding the impact of testing on teacher retention. Of the 56 teachers in an urban Midwestern city interviewed, most expressed that they felt pressure and stress around testing, including feeling helpless when students were not showing progress. The teachers also expressed that they felt stress around being forced to teach to the test or teaching a curriculum that is heavily focused on preparing students for taking a standardized test (Shernoff et al., 2011). The teachers shared that the district-mandated specific curriculum, forcing teachers to feel like they were losing autonomy in their roles. Shernoff et al. (2011) concluded that the changes in the testing standards over time impacted school culture and contributed to the stress experienced by novice teachers leading to higher teacher attrition.

Certification requirements. Alternative certification programs in the United States were developed in the 1980s in response to teacher shortages (Easley, 2006). These programs require participants to complete field-based experience and coursework while teaching (Zhang & Zeller, 2016). Participants in alternative certification programs were more likely to be people of color who live in urban communities and teach minority students (Natriello & Zumwalt, 1993).

Studies also concluded that teachers in alternative certification programs believed that they were less prepared by pursuing an alternative certificate than their traditionally certified peers or teachers. They graduated from university with a degree in education (Fitchett, McCarthy, Lambert, & Boyle, 2018).

Allen (2005) considered if alternative certification programs had higher than average teacher retention rates. The researcher found that the retention of alternatively certified teachers is comparable to that of traditionally prepared teachers in the short term; however, the study was inconclusive when looking at long-term retention (Allen, 2005). Another researcher focused on alternatively certified teachers in New York City's Mercy College's New Teacher Residency Program. A researcher concluded that 77% of participants desired to remain in teaching, identifying a desire to have influence in their students' lives (Easley, 2006). This finding correlated with national studies on alternative route teachers, which found that 62% of alternatively certified teachers planned to remain in teaching (Feistritz, 2005).

Although these studies found higher intents to remain in the classroom, on average, teachers who participate in non-traditional teaching certification pathways are more likely to leave the profession than traditionally trained teachers (Boyd, Lankford, Loeb, & Wyckoff, 2005). One study that included TFA corps members who were alternatively certified in Baltimore City Public Schools showed results that contradicted the national average, finding that in the first two years, TFA corps members, all of whom were undergoing an alternative certification route, were more likely to remain in the classroom than their counterparts who were traditionally trained (Iver, Abele, & Sidney, 2007). Additionally, the authors concluded that teachers in alternative certification programs persisted more than their traditionally trained counterparts in Years 4 and 5.

School and district characteristics. Researchers have concluded that the characteristics of a school can have more of a correlation with retention than the characteristics of the teachers themselves (Hughes, 2012; Ingersoll, 2001; T. M. Smith & Ingersoll, 2004). School staffing is not due to insufficiencies in the pool of qualified teachers or increases in student population, but rather an inadequacy in the schools' ability to retain teachers due to job dissatisfaction (R. M. Ingersoll, 2001; T. M. Smith & Ingersoll, 2004). Job satisfaction can be impacted by an individual's perception of their school's values, support, resources, compensation, school demographics, and subject placement (Hughes, 2012; R. M. Ingersoll, 2001).

Compensation. One component of an individual's exosystem is their compensation (Bronfenbrenner, 1976). The correlation between salary and teacher retention is a topic that has been widely researched over time. Baugh and Stone (1982), who studied the effect of teacher unionization between 1980 and 2000, found that teachers were as responsive to changes in compensation as any other profession. Other researchers have found that a teacher's expected salary in the coming year is the highest predictor in their decision to stay or leave their roles (Theobald, 1990).

Teachers are more likely to leave the classroom for a higher paying role in a different field than transfer to another teaching role with higher compensation (Baugh & Stone, 1982). Straubhaar and Gottfried (2016) interviewed 25 TFA corps members in Los Angeles who shared that teaching was not sustainable due to the salary and considered their time in the classroom as a charity. Most participants planned to leave the classroom searching for lucrative careers (Straubhaar & Gottfried, 2016).

Some district leaders have implemented bonus programs to incentivize teacher retention, but they have been ineffective at retaining teachers. In North Carolina, certified math, science,

and special education teachers in high-poverty or low-performing middle and high schools received an annual salary bonus of \$1,800 if they committed to teaching the following school year (Clotfelter, Glennie, Ladd, & Vigdor, 2008). Retention data showed that before implementing the program, 62% of teachers in bonus-eligible contexts continued to teach the following year. During the 2001 to 2002 school year, the retention rate increased to 65%, which was not a significant increase (Clotfelter et al., 2008). Before the bonus program, schools were generally successful at retaining humanities teachers; however, once the program was initiated, the retention of English and social studies teachers declined (Clotfelter et al., 2008).

Staff relationships. Administrative support, staff relations, mentorship or coaching, and teacher influence have correlated with teacher retention (Cooper & Travers, 2012; Johnson, 2006; Ladd, 2009). Ladd (2009) found that teachers' perceptions in North Carolina about their school leadership were more predictive of retention than other organizational factors. Ladd conducted a qualitative study on teachers in North Carolina to examine how perceptions of working conditions predict teacher intentions to persist in the classroom and student achievement. The researcher divided perceptions on working conditions into six categories: leadership, resources, teachers' autonomy, professional development, mentoring, and time (Ladd, 2009). Ladd (2009) used existing data because the Governor initiated a statewide survey of working conditions to all public school teachers and administrators and received a 50% response rate in the initial year, 2002, and a 70% response rate in subsequent years. The researcher focused specifically on the results from the 2006 year. In the study's conclusion, Ladd found a correlation between the perceived difference between school leadership and the planned departure rates. On standard deviation, the perception of school leadership caused a 40%

difference in planned departure rates of those teachers from the mean planned departure rate on the elementary level and 30% on the high school level.

The perception of autonomy served as a predictive factor of lower planned departure levels for the high school teachers in the study (Ladd, 2009). Johnson (2006) cited other research that suggested administrators' primary influence on retention was their ability to control the autonomy and influence teachers have on the broader school context. Teachers are more satisfied in their roles, thus, more likely to persist in the classroom if they perceive their roles have opportunities for autonomy (Cooper & Travers, 2012; Johnson, 2006). Teachers are also more likely to persist if they can contribute to decisions that impact schoolwide structures (Allensworth, Ponisciak, & Mazzeo, 2009; Cooper & Travers, 2012). Teachers will remain in education if they can hold educational roles within and outside the classroom that allow them to stretch their leadership (L. Anderson & Olsen, 2006).

L. Anderson and Olsen (2006) found that the number of support teachers received on the campus was a predictive retention factor. In their study of 15 novice teachers in a 2-year urban teacher preparation master's program at the University of California, Los Angeles, L. Anderson and Olsen (2006) found that teachers were most likely to persist if they received ongoing support. The researchers conducted interviews and classroom observations to determine the retention of novice teachers. Through the interviews, the study concluded that the teachers who took on additional roles and responsibilities outside of their classroom, such as overseeing the community partnerships, had higher retention (L. Anderson & Olsen, 2006). Teachers who communicated a desire to leave discussed the lack of mobility or promotion within the teaching career (L. Anderson & Olsen, 2006). The researchers also concluded that teachers were more likely to persist if consistently provided with professional development and coaching throughout

their teaching career (L. Anderson & Olsen, 2006). The researchers found that teachers needed a sense of autonomy from the leadership team and a support system of coaches and mentors composed of other teaching staff (L. Anderson & Olsen, 2006).

Novice teachers are provided with a mentor in the same subject field. They participated in experiences where they can collaborate with other teachers are less likely to leave their school and the teaching field after their first years than average (T. M. Smith & Ingersoll, 2004). Additionally, teachers are more likely to persist at their school if they have a positive relationship with their peers (Darling-Hammond, 2003; Glaser, 2003) or have a colleague they can go to for advice (T. M. Smith & Ingersoll, 2004). These various relationships contribute to an individual's mesosystem, and all contribute to how a novice teacher sees themselves and their work (Bronfenbrenner, 1976).

School demographics. Schools with larger populations of low-income students, students of color, and low-performing students experience higher teacher turnover (Boyd et al., 2005; Hanushek, Kain, & Rivkin, 2001; Ingersoll, 2001). When teachers transfer to new districts, they traditionally leave low-income communities to teach in more affluent environments (Hanushek et al., 2001). Greenberg and McCall (1974) conducted an empirical study of teachers in San Diego Public Schools between 1970 to 1971 and 1971 to 1972 school years to research the flow of teachers in large city school systems. The study concluded consistent findings as to the aforementioned studies. New teachers were traditionally placed in schools with low socioeconomic status, and over time, those teachers would move to schools with a higher socioeconomic status where they traditionally persist (Greenberg & McCall, 1974). Since this study, other researchers built on Greenberg and McCall (1974) and studied the work transitions of teachers (Boyd et al., 2005; Hanushek et al., 2001; Ingersoll, 2001).

As teachers leave urban school settings, school leaders not meeting academic requirements and need stability must continuously replenish their teaching staff. The students are taught by novice educators (Ingersoll, 2004). Novice teachers traditionally have lower student achievement scores than their veteran counterparts; thus, the cycle continues (Ingersoll, 2004). According to Boyd et al. (2005), teachers in the lowest-performing schools in New York City were novice educators, with a 27% attrition rate for novice teachers in low-income communities. Hanushek et al. (2001) also concluded that teachers in Texas left their lower-achieving schools to work in higher-performing schools. One study found contradictory findings. Hughes (2012) found that teachers in schools with students from low socioeconomic backgrounds were more likely to indicate a desire to be career teachers than their peers in schools with higher socioeconomic status because they were intrinsically motivated to make a difference in a community with higher needs.

Subject placement. The grade level that a novice teacher is assigned to teach can also impact their retention (Brill & McCartney, 2008; Guarino et al., 2006). Elementary teachers remain in the classroom longer than secondary teachers (Guarino et al., 2006; Murnane, Singer, & Willett, 1989). Brill and McCartney (2008) concluded that secondary teachers would leave at a higher rate than elementary teachers because they must deal with the vicarious stress of their students' adolescent problems.

Similarly, teaching subjects correlate with attrition rates. Due to other available careers in math and science, teachers in those subjects are more likely to leave education in search of other professional opportunities than their humanities counterparts (Borman & Dowling, 2008; Guarino et al., 2006; Ingersoll, 2001; Kukla-Acevedo, 2009). Donaldson and Johnson's (2010) longitudinal study of three cohorts of novice teachers from 2000 to 2002 had complementary

findings. The researchers indicated that corps members whose placement required them to teach multiple grade levels, subjects, or subjects outside of their college expertise were more likely to resign from the corps (Donaldson & Johnson, 2010). The findings' outlier was corps members placed in science classrooms (Donaldson & Johnson, 2010). Teachers who studied science in their college experience left the classroom at higher rates than teachers teaching science without backgrounds in that discipline (Donaldson & Johnson, 2010).

Teacher characteristics. The focal individual's microsystem consists of interpersonal relationships and is both influenced by and influences an individual's perception of themselves (Bronfenbrenner, 1976). Research on teacher retention is starting to focus less on organizational factors like compensation and the effects of legislation to focus more on the resilience building of teachers (Curtis, 2012). Given that many of the structures of school systems have not changed, researchers believe that the emphasis should be placed on determining how to build best teacher longevity and capacity (Levine & Haselkorn, 2008). Aspects of the teacher's personality could mitigate their experience with external factors; thus, decreasing their likelihood to leave the classroom. These personality factors include demographic characteristics (Theobald, 1990), resilience-building (Doney, 2013), and self-efficacy (T. M. Smith & Ingersoll, 2004).

Demographic characteristics. Age, gender, race, and level of educational attainment have all shown correlations with teacher retention in previous research. When looking at age, each year spent teaching in the classroom increased the likelihood of retention for educators aged 44 or younger (Theobald, 1990). Using Theobald (1990) as a framework, Sass et al. (2012) focused on educators in Texas. For their study, the researchers examined a dataset of over 215,485 teachers in Texas between 1995 and 2009. The researchers found that young (less than 25 years old) and mid-adult (between 25 and 30 years old) teachers had higher attrition rates than

their older colleagues (Sass et al., 2012). Researchers concluded that the age of a teacher correlates with their retention in the classroom (Sass et al., 2012; Theobald, 1990). Hanushek and Rivkin (2007) concluded that the younger teachers in their study tended to leave the profession due to dissatisfaction or changes in their familial obligations while older teachers left for retirement. However, Kirby et al. (1991) speculated that attrition is higher among younger teachers because they have less teaching experience to draw upon when they encounter new problems.

Following this hypothesis, Grissmer and Kirby (1991) studied the correlation between years of service and retention and found a positive correlation. Hughes (2012) investigated this hypothesis in his study of 789 teachers in the Arkansas Public School district. There was no correlation between age and the retention of participants; however, there was a highly statistically significant correlation between years of service and retention (Hughes, 2012). The data supported the conclusion that teachers with 10 more years of experience are most likely to remain in the profession (Hughes, 2012). Most participants cited joy for teaching or investment in the profession as their primary motivators.

Studies have also shown a correlation between gender and retention. Hughes (2012) found that men were more likely to remain in teaching, even though women made up most of the teaching field and self-reported higher commitment to the occupation (Ingersoll, 1997). However, Sass et al. (2012) concluded contradictory findings in their study of teachers in Texas, finding higher retention among female educators.

Gottlieb (1964) speculated that race influenced retention. Gottlieb interviewed 89 Black and White elementary educators about their experience with teaching in a Midwestern urban community. The researcher revealed that the Black teachers were more likely than their White

counterparts to be from the communities in which they were teaching (Gottlieb, 1964). Although both groups experienced job dissatisfaction, the Black teachers indicated their large class sizes and lack of resources as primary factors. In contrast, the White teachers listed student inabilities, lack of motivation, and discipline as the main contributing factors for leaving the profession (Gottlieb, 1964). Their mindsets about their students were also contradictory (Gottlieb, 1964). This study indicated that individuals could interpret the same external environment differently based on their social constructs.

Because of Gottlieb's (1964) work, other researchers using his work as a frame concluded that White teachers would leave the classroom more than teachers of color (Borman & Dowling, 2008; Ingersoll, 2001; Kirby et al., 1991). Borman and Dowling (2008) conducted a meta-analysis on teacher career paths to better understand the factors that correlate with teacher attrition and the mitigating factors. The analysis consisted of 34 studies and 63 attrition factors, such as teachers' characteristics and organizations' characteristics (Borman & Dowling, 2008). The analysis found that organizational characteristics, specifically student body composition and resources, were key moderators of teacher attrition using economic labor theory as a framework (Borman & Dowling, 2008). Ingersoll (2001) analyzed the Schools and Staffing Survey and the supplemental Teacher Follow-up Survey conducted by the National Center for Education Statistics, the largest data source available on staffing and organizational aspects of schools. Ingersoll (2001) focused primarily on data from the 1991 to 1992 Teacher Follow-up Survey and connected it to the 1990 to 1991 Schools and Staffing Survey. The analysis indicates that teacher attrition is due to job dissatisfaction and a desire to pursue other fields.

There is contradictory research on the correlation between a teacher's level of education and retention. Theobald (1990) found that teachers with master's degrees were 35% more likely

to leave the classroom than their peers, and those with doctorates were 40% more likely to leave. Theobald suggested that states should mandate higher educational attainment to alter the perception of education and increase retention. Researchers have theorized that teachers with higher educational attainment tend to select careers other than teaching (Borman & Dowling, 2008; Theobald, 1990). Hughes (2012) found no correlation between the level of education and retention, which contrasted the findings of Theobald (1990) and Borman and Dowling (2008), who found a strong statistical correlation. Green and Muñoz (2016) found no correlation between degree attainment and retention. In his study on job satisfaction, 638 survey respondents were teachers in a large urban school district for three years or less (Green & Muñoz, 2016). The researchers did not find a correlation between age, gender, race, or education; instead, they found that the teachers more likely to be dissatisfied or choose not to return the following year were those who felt unprepared for the role, unsupported by their administration, or had low self-efficacy (Green & Muñoz, 2016).

Resilience building. Polidore's (2004) theory of adult resilience in education is a theoretical framework when examining the resilience building of teachers. Polidore's theory is grounded in the EST (Bronfenbrenner, 1976) and hypothesized that adults develop resilience as they learn to cope with stressors over time. Polidore's (2004) theory hypothesizes that an emphasis should be placed on building teacher capacity to cope with the various ecological factors on all levels, impacting their work and increasing teacher attrition (J. L. Taylor, 2013). Doney (2013) also found that adults built resilience through encounters with stress. The researcher found that each encounter with stress allowed participants to engage with their protective factors (use of individual skill or support system) and build resilience (Doney, 2013).

Based on an ethnographic study of three career teachers, or teachers who have remained in the classroom for the entirety of their career, Polidore's (2004) resilience theory consists of eight themes of resilience: commitment, response to change, ability to view adverse situations positively, positive relationships, views of the importance of education, autonomy, locus of control, and moral or spiritual support. Polidore asserted that for educators to persist through the stressors they experienced, these resilience themes were traditionally prevalent in their roles.

J. L. Taylor (2013) examined Polidore's (2004) theory of adult resilience in education by analyzing data from interviews with four female African-American teachers before, during, and after the desegregation of their rural school district in the South. J. L. Taylor (2013) studied which characteristics of Polidore's (2004) theory of adult resilience in education influenced the four educators during a period filled with adversities for African-Americans and women. Through the cross-case analysis of the interviews, J. L. Taylor (2013) found that each of Polidore's (2004) themes emerged in the narratives of the four participants and served as motivations that helped them persist as educators. J. L. Taylor (2013) also added a theme, self-efficacy.

Teacher self-efficacy. According to Milner's (2002) seminal work, those with self-efficacy believe they are competent and can fulfill their roles. The concept of self-efficacy derives from the theoretical framework of the social cognitive theory, which argues that individuals construct beliefs about their abilities to perform a role (Bandura, 1986). Based on the social cognitive theory, teachers who believe they are unsuccessful will put forth less effort and be less effective; thus, developing their own self-fulfilling prophecies (Tschannen-Moran & Hoy, 2007). Researchers have found that a teacher's self-efficacy is positively correlated with their job satisfaction (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012; Johnson & Birkeland,

2003; T. M. Smith & Ingersoll, 2004; Stockard & Lehman, 2004), and negatively correlated with teacher stress (Brouwers & Tomic, 1999).

Bandura (1977) theorized four main influences of strong self-efficacy—mastery experiences, verbal persuasion, vicarious experiences, and physiological arousal. Mastery experiences are past performances that impact your perception of your ability to accomplish your role tasks (Bandura, 1977). In other words, a teacher's self-efficacy becomes stronger if they perceive their previous performance as a teacher to be successful (Tschannen-Moran & Hoy, 2007). If their past performance was a failure, the teacher often believes that future performances will also become failures (Tschannen-Moran & Hoy, 2007). Verbal persuasions are the teacher's messages about their performance from their peers, administrators, students, and parents (Bandura, 1977; Tschannen-Moran & Hoy, 2007). Vicarious experiences are when individuals see someone with whom they strongly identify be successful in their performance (Bandura, 1977; Tschannen-Moran & Hoy, 2007). By seeing someone else perform well in similar contexts, the teachers can envision themselves successfully (Tschannen-Moran & Hoy, 2007). Lastly, psychological and emotional arousal, or the feeling of joy a teacher gets from teaching, also contributes to their self-efficacy; however, the stress associated with their roles can weaken their self-efficacy (Tschannen-Moran & Hoy, 2007).

When teachers draw upon their self-efficacy, they examine the problem and their abilities to master that problem using the four influences mentioned above (Tschannen-Moran, Hoy, & Hoy, 1998). Mastery experiences are the most positively correlated factors to teacher self-efficacy (Bandura, 1977). For example, teachers who have a mastery experience of their students having exemplary gains on standardized tests are less likely to leave the teaching profession (Boyd et al., 2008; Goldhaber, Gross, & Player, 2007; Hanushek et al., 2001). If a teacher's self-

efficacy is contingent upon past mastery experiences, then organizational factors can mitigate the lack of mastery experiences that novice teachers can draw upon (Tschannen-Moran & Hoy, 2007). The Teacher Sense of Efficacy Scale was developed to determine the organizational factors that correlate with strong self-efficacy (Tschannen-Moran & Hoy, 2007). The researchers surveyed 255 novice teachers who were graduate students at two state universities in Ohio and one university in Virginia and their veteran elementary and secondary peers at schools in those same states who had from 1 to 29 years of teaching experience (Tschannen-Moran & Hoy, 2007). The researchers found that organizational factors such as resources and interpersonal support correlated with self-efficacy beliefs of novice teachers but did not correlate with self-efficacy in their veteran peers (Tschannen-Moran & Hoy, 2007).

Similarly, Ouellette et al. (2018) studied the various organizational and individual factors contributing to teacher job stress and satisfaction in a Midwestern urban school district. Participants completed the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and other questionnaires to measure their perception of organizational health. The study found that the perception of the organization's health, resources, and support had a more significant correlation with stress than self-efficacy (Ouellette et al., 2018).

Perfectionism in teachers. Teachers are charged with increasing student achievement; however, in schools where teacher attrition is high, there is not a wealth of shared skills among the staff to reach those goals (Lortie, 2002). This low level of expertise compared to the high demand for results can contribute to a stressful environment (Cohen, 2011). Perfectionism is an individual's tendency to pursue idealized standards (Jones, 2016). Given the often-unrealistic goals associated with teaching, being a perfectionist correlates with more significant stress (Jones, 2016).

Researchers have concluded links between perfectionism and stress in teachers (Flett & Hewitt, 2002; Stoeber & Rennert, 2008). Jones (2016) hypothesized that teachers who were perfectionists would be more likely to leave the classroom. Jones (2016) used the Almost Perfect Scale-Revised (Slaney, Rice, Mobley, Trippi, & Ashby, 2001) to measure participants' perfectionism. The questionnaire measures perfectionism along three dimensions: standards (the level in which one tries to do their best), order (levels of organization and discipline), and discrepancy (measuring up to expectations; Jones, 2016). Jones (2016) required teachers to self-report the total number of years they planned to stay in the classroom (Slaney et al., 2001). The researcher found that none of the dimensions of perfectionism correlated with self-reported commitment (Jones, 2016). When considering teachers in urban versus suburban communities, long-term teachers in urban communities reported lower tendencies in the order dimension than long-term teachers in suburban communities (Jones, 2016). Jones (2016) hypothesized that his findings meant that discipline and organization are less critical to this group of educators. Overall, Jones (2016) concluded that personal attributes should be considered for the placement of teachers in school because some of the dimensions of perfectionism will lead to attrition under certain environmental conditions. For instance, if discipline and order are essential values for a teacher, being placed in a school with high suspension or disciplinary rates or undergoing a new reform may not be conducive to that teacher's environmental needs (Jones, 2016).

Because USTA recruits high-achieving graduates from elite schools, they would likely exhibit some perfectionist characteristics. Straubhaar and Gottfried (2016) conducted a study on novice teachers that indicated trends in the personalities of the novice teachers who enrolled in a highly selective teacher preparation program. Straubhaar and Gottfried (2016) conducted ethnographic interviews of 25 novice teachers in Los Angeles to determine their characteristics.

The researchers concluded that the teachers enrolled in the highly selective program were a particular archetype of teachers. These teachers are idealistic, organized, dedicated, and intelligent. Given Jones' (2016) findings that some perfectionist tendencies, such as a desire for order, correlate with attrition in urban settings, and USTA recruits similar candidates; thus, perfectionism could play a role in retaining USTA teachers because the organization places participants with perfectionist characteristics in urban communities.

Occupational stress. When analyzing USTA's internal data, the most prominent factor associated with attrition was stress. Of those who were emergency released or resigned, 11% were due to mental health concerns (C. Chambers, personal communication, January 12, 2019). In anecdotal notes, the teachers' experiences in their roles caused their mental health to be unstable, and the role of teaching was no longer manageable (C. Chambers, personal communication, January 12, 2019). Similarly, the American Federation of Teachers (2015) conducted an 80-question survey on teacher well-being. Of the 30,000 educators surveyed, most teachers expressed feelings of occupational stress.

Occupational stress accumulates work-related stressors or events within the workplace that are considered stressful (R. R. Ross & Altmaier, 1994). Occupational stress occurs when an individual perceives that the demands of a job outweigh the resources available (Pepe & Addimando, 2013). The more frequently an individual experiences feeling that the demands outweigh their abilities, the higher that individual's level of occupational stress (Motowidlo, Packard, & Manning, 1986). The effects of stress on an individual teacher can lead to physiological, psychological, and behavioral problems (Jenkins & Calhoun, 1991). Stress-related changes in the individual teacher include fatigue, depression, anxiety, absenteeism, and leaving the teaching profession (Cooper & Travers, 2012; Jenkins & Calhoun, 1991).

Long-term effects of occupational stress may cause teacher burnout or total emotional exhaustion (Brock & Grady, 2000). The Maslach Burnout Inventory identifies three components of burnout: depersonalization, reduced personal accomplishment, and emotional exhaustion (Horn & Schaufeli, 1998). Depersonalization is when a teacher exhibits negative attitudes toward their students and coworkers or avoids building relationships (Brock & Grady, 2000). When teachers have reduced personal accomplishment, they perceive they are ineffective at their roles (Brock & Grady, 2000). Lastly, emotional exhaustion is when a teacher experiences a depletion of emotional energy (Brock & Grady, 2000). According to Brock and Grady (2000), 40% of teachers experience burnout at some point in their teaching career (Brock & Grady, 2000).

Herman et al. (2018) found that 93% of the 121 teachers in their study experienced burnout at some point in their careers. The study occurred at nine elementary schools in an urban Midwestern school district. Teachers completed a hard copy survey to self-report their level of burnout, stress, and efficacy. Burnout was measured using the Maslach Burnout Inventory (Herman et al., 2018). An additional question, “How stressful is your job” (Herman et al., 2018, p. 20), was added to measure stress. The researchers divided the participant responses into three groups based on their response to the coping and burnout surveys (a) high coping/low burnout accounted for 60% of the participants, (b) 30% of participants fell into the moderate coping and burnout group, and (c) 3% fell into the *well-adjusted class* (Herman et al., 2018).

The cause of stress in teachers can be divided into six categories: (a) perceptions of the job conditions; (b) the individual’s understanding of their roles in the organization, (c) relationships among the students and staff, (d) the individual’s perception of their careers development opportunities, (e) the structure of the organization, and (f) home-work balance (Cooper & Travers, 2012). Research has shown a significant correlation between the perception

of organizational climate and experience of occupational stress (Benedicta, 2014). Benedicta (2014) cited using Santhappan's (1987) Teacher Stress Source Scale and School Organizational Climate Scale to survey 200 secondary teachers about their perceptions of their organizational climate and their occupational stress levels.

Organizational climate is the perceived characteristics of a working environment, specifically the worker's perception of the flexibility, standards, and recognition associated with a role. The researcher found a positive correlation between the perception of organizational climate and experience with occupational stress (Benedicta, 2014). Similar conclusions were drawn during a study of elementary school teachers' stress and perception of organizational health (Ouellette et al., 2018). Participants were given several questionnaires, including the Quality of Teacher Work-Life Survey (Pelsma, Richard, Harrington, & Burry, 1989) to measure teacher stress and satisfaction, the Organizational Health Inventory-Elementary (Hoy & Woolfolk, 1993) to measure the teachers' perception of the organizational health of schools, and the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) to measure the perceptions of teacher ability to affect student learning and engagement. The researchers found that the strongest predictor of stress and satisfaction was the teacher's perception of organizational health (Ouellette et al., 2018).

An individual's perception of stress depends on the interaction the individual has with their ecosystem and their interpersonal characteristics (Cooper & Travers, 2012). Benedicta (2014) found that occupational stress among teachers in urban communities was greater than their peers in rural environments. Similarly, Pepe and Addimando (2013) found that subject placement can influence stress. Pepe and Addimando examined the connection between student behaviors in special education classes versus general education classes and teacher occupational

stress. Participants took the Challenging Students Standard Questionnaire (Wolf van der & Everaert, 2003). The questionnaire measured perceived stress and the student behaviors that were most challenging and frequent throughout the school year (Pepe & Addimando, 2013). The study results indicated that special education teachers experience more occupational stress due to the work they do with students who present challenging behaviors.

First-year teachers have a learning experience conducive to occupational stress and burnout (Olson & Osborne, 1991). The 10 themes prevalent among novice teachers (Figure 2) identified by Olson and Osborne (1991) and the added context regarding expectations versus ability explained by Corcoran (1981) align with the causes of occupational stress identified in the research (Table 1). Anbazhagan and Rajan (2013) identified organizational factors as including role, job, and physical factors that contributed to occupational stress factors. Role factors include role ambiguity, which aligns with one of the 10 themes of the novice teacher experience—the search for understanding their role (Olson & Osborne, 1991). Job factors include feelings of inadequacy, difficulties with performance in their roles, and beliefs around inadequate compensation (Anbazhagan & Rajan, 2013).

Additionally, the fear of a negative job evaluation correlates with high occupational stress (Motowidlo et al., 1986). The fear of not meeting job expectations and insecurity is another overarching theme of a novice teacher's experience (Johnson & Birkeland, 2003; Olson & Osborne, 1991). Overall, based on the aforementioned research on occupational stress, a novice teacher's role aligns with higher levels of occupational stress than their veteran peers.

Table 1

Correlations Between 10 Themes of the Novice Teacher Experience and Occupational Stress

Themes in novice teacher experience (Olson & Osborne, 1991)	Themes in occupational stress (Anbazhagan & Rajan, 2013)
Sense of responsibility: Novice teachers felt a sense of extensive responsibility to become competent teachers quickly to be ready for children.	Role overload: When an employee feels they are being asked to fulfill tasks they are unequipped to manage.
Ability to meet expectations: Novice teachers were unfamiliar with expectations and felt disoriented toward the work as well as apprehension about their abilities to accomplish the tasks associated with their roles. Overall, the teachers felt inadequate.	Job difficulty: When an individual finds difficulty in performing their job due to inadequate training or a sense of not knowing.
Achieving control: Novice teachers felt a need to be in control of experiences within the classroom	Inadequacy of role authority: When an individual feels that their role does not allow for them to have authority, input, or control over decisions.
Search for role clarity: Novice teachers search for an understanding of their roles and gain a better pedagogical understanding of their work.	Role ambiguity: When an individual is unclear on how their roles is supposed to be done.

Stress involves an interaction between an individual and their external environment and how the individual perceives their external environment (Lazarus & Folkman, 1984). The individual appraises the severity of their stress and their abilities to handle the situation utilizing their abilities and available resources (Lazarus & Folkman, 1984). Thus, it is plausible to mediate the effects of stress if an individual can be taught how to cope with stress or change their perception of the stressors in their external environment (Harney, 2008).

Figure 3 explains the relationship between each of the factors impacting teacher retention. The perception of teaching as a profession (Nenty et al., 2015) and governmental policies (Cohen-Vogel, 2005) are aspects of the chronosystem and macrosystem. These systems work in tandem to influence the exosystems and mesosystems, such as the district and school (Bronfenbrenner, 1976). Based on the perceptions surrounding education, its purpose, and the role of a teacher and governmental legislation, district leaders make decisions about testing policies, professional development, coaching structures, and school demographics. Those district

and school-level policies affect certification requirements and the subject placement of teachers based on what they are considered highly qualified to teachers (Cohen-Vogel, 2005). Combined, these policies, structures, and decisions can lead to occupational stress in novice teachers. The individual teacher's self-efficacy and resilience can mitigate and intensify the influence the factors have on a novice teacher's occupation stress (Cannrinus et al., 2012). This relationship is also reciprocal because positive experiences with stress and mastery experiences can increase self-efficacy and resilience (Cannrinus et al., 2012). The novice teacher's external and internal experiences with the stress they experience in their roles can lead to their decision to persist in the profession or leave (Olson & Osborne, 1991).

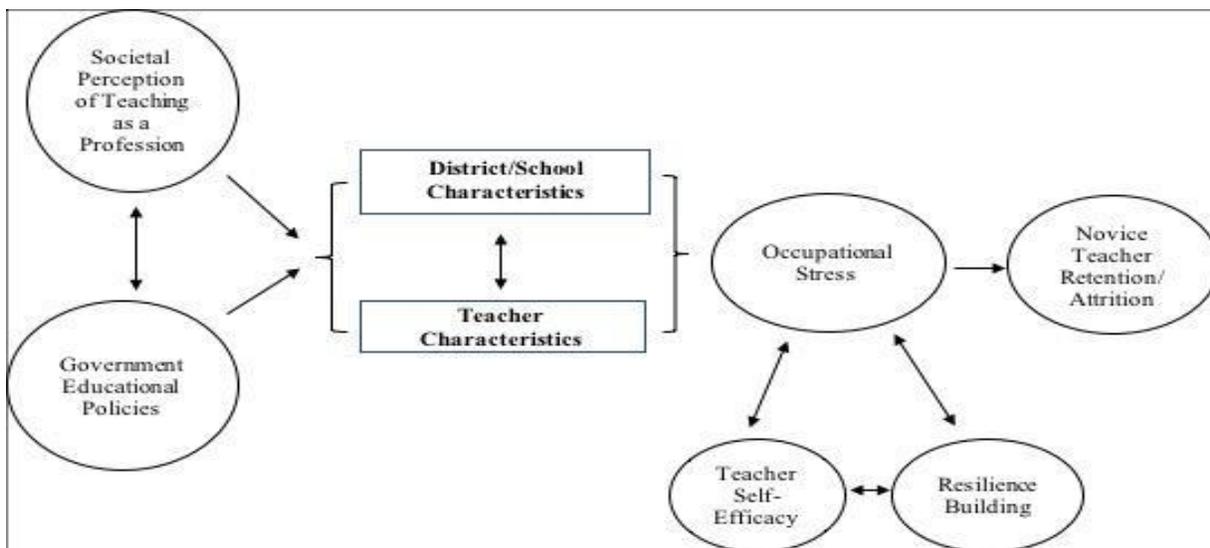


Figure 3. Conceptual framework of factors influencing novice teacher retention.

Summary

Previous research has drawn many correlations between retention and various factors with a novice teacher's macrosystem, exosystem, mesosystem, and microsystem. These have persisted through time and often contribute to stress experienced by novice teachers (Lazarus & Folkman, 1984). However, the individual's interaction with these systems and their perception of the stressors are different (Harney, 2008). Historical and organizational factors, such as

compensation, state-mandated testing, and education reform, affect teachers' retention. The research indicated that consistent exposure to occupational stress could lead to burnout, resulting in teachers' decision to leave their roles (Brock & Grady, 2000; Cooper & Travers, 2012; Jenkins & Calhoun, 1991).

Moreover, the factors that contribute to occupational stress directly correlate with the experiential cycle of novice teachers (Anbazhagan & Rajan, 2013; Olson & Osborne, 1991). However, novice teachers' self-efficacy and resilience can mitigate their experience with occupational stress, contributing to their persistence in the classroom (Canrinus et al., 2012). After reviewing the literature discussed in this review, the researcher identified a need to explore the experience of novice teachers enrolled in USTA. Specifically, the researcher chose to examine the novice teachers' experience with occupational stress and burnout. Given the relationship between self-efficacy, resilience, and burnout, the researcher also studied USTA members' self-efficacy and resilience levels. Additionally, the researcher examined the coping techniques used by the participating USTA members and their levels of perfectionism as these are components of resilience and self-efficacy. The forthcoming needs assessment examined the perceptions of USTA participants as it pertains to stress in their roles and their decision to persist in the classroom beyond their 2-year commitment to USTA.

Chapter 2: Needs Assessment

After examining the literature, there was a need to explore the various factors as they pertain to this study's focal population; thus, a needs assessment was designed to explore the causes associated with stress in novice teachers enrolled in USTA, their experience with a burnout in their roles, self-efficacy, resilience, and their intent to persistence in the classroom. The researcher chose to focus on intent to present instead of retention data due to the time constraints of the study. This chapter outlines the purpose of the study and the research questions the study sought to examine. Next, it outlines the researcher's various procedures and the methods used to investigate the relationship between novice teacher experience, stress, and retention. Finally, a description of the findings and a summary of the results will be provided to develop a foundation for further investigation.

Context of the Study

USTA is an alternative teacher organization that recruits recent graduates and individuals interested in changing careers to commit to teaching for two years in an underperforming school. Underperforming schools are traditionally categorized based on persistently low scores on standardized tests, low graduation rates, or high dropout rates (Seder, 2000). Novice teachers in their first or second year, who are part of the USTA organization, serve as lead teachers or the teacher of record in the classroom (C. Chambers, personal communication, January 12, 2019). USTA's teachers are traditionally recent college graduates from elite schools who are under the age of 25. A USTA region in a metropolitan city in the south served as the focus of this study.

In that region, 80% of the region's 190 participants are under 25 years of age, and 14% are between the ages of 25-29. The rest are considered career change applicants who joined the organization after working in a different field. Most participants also relocate for the experience.

Eighty-two% of the 2019 USTA participants in the focus region were from outside the southern metropolitan region. Additionally, most participants were not certified teachers when they entered the USTA, nor did they major in education. In the study's focus region, 99% of USTA's teachers participated in an alternative certification program in their first years as lead teachers.

Statement of Purpose

The purpose of this needs assessment was to determine key organizational factors within USTA that contribute to occupational stress or burnout in teachers. Specifically, the study examined the sources of pressure in the roles of novice teachers enrolled in a southern metropolitan region of an alternative teacher preparation program. Another goal of the needs assessment was to identify any personality traits unique to members who plan to teach in the classroom beyond their 2-year commitment. The needs assessment examined indicators of resilience, self-efficacy, and perfectionism in the members as all of these factors could contribute to the individual's appraisal of the severity of their stress and their ability to handle the situation (Lazarus & Folkman, 1984). Lastly, the researcher examined which coping strategies members predominately use to determine if specific strategies align with higher self-reported commitment or lower occupational stress levels. Thus, USTA members were given an online questionnaire (see Appendix A) that used a series of Likert-scale questions to examine the systemic issues impacting a novice teacher's experience and the potential areas in which USTA could mitigate the amount of occupational stress experienced by their members.

Needs Assessment Research Questions

NARQ1. What are the self-reported plans for the participating novice teachers after completing their 2-year service?

NARQ2. What are USTA's members' sources of pressure in their role?

NARQ3. What coping strategies are USTA members currently using to manage their stress?

NARQ4. What teacher characteristics (self-efficacy, perfectionism, resilience-building) are prevalent in USTA members who plan to teach for 5 or more years?

Methodology

Participants. One of USTA's sites in a southern, major metropolitan city was chosen for the study. USTA had 190 members in this region. Fifty-seven percent of the members were in their first years as lead teachers in their classrooms. The remaining 82 members were in their second years. The gender breakdown was 75.2% female and 24.8% male (C. Chambers, personal communication, January 12, 2019). Considering the ethnic breakdown of USTA's members, 35.36% of members self-identified as Black, 26.7% White, 19.37% LatinX or Hispanic, 11.5% Asian American and Pacific Islander, and 5.76% multiethnic/multiracial (C. Chambers, personal communication, January 12, 2019). Eighty percent of members were under 25 years of age, 14% were within the 25 to 29 range, and USTA 30 and over made up the remaining 6% of the sample population (C. Chambers, personal communication, January 12, 2019).

All USTA members received a recruitment email (see Appendix B) with the link to complete an online survey. The online survey included the consent form, allowing the researcher to use the data collected from the anonymous survey (see Appendix C). Of the 190 current USTA members, 46 members completed the Google Form, with a response rate of 24.2%. Of those who participated in the needs assessment, 54% are in their first year as USTA members. The remaining 46% of the participants were in the second year with the organization. The gender breakdown of the needs assessment participants was 69.6% female and 30.4% male. When

examining the age of the needs assessment participants, 73.9% were under 25 years of age, 15.2% were within the 25 to 29 range, and 10.9% were 30 years of age and older.

All data points aligned with that of the original population; however, when considering ethnic and racial demographics, the population of members who participated in the needs assessment did not align with that of the total population of USTA members in the focus city. The self-reported ethnic breakdown of the needs assessment participants included 23.9% Black, 39.1% White, 21.7% LatinX or Hispanic, 6.7% Asian American and Pacific Islander, and 8.6% multiethnic/multiracial. The study sample included more individuals who identify as White than the target population.

Lastly, the grade level and subject placement of USTA participants were also examined. This factor was important to the study because previous literature indicates a correlation between subject placement and retention. In the metropolitan region, 17.8% taught at high schools, 36.7% taught at middle schools, and the remaining 45.5% taught at elementary schools in the district (C. Chambers, personal communication, January 12, 2019). Of those who participated in the needs assessment, 10.4% taught in high schools, 52.1% taught in middle schools, and 37.5% taught in elementary schools in Houston; thus, the participant size was proportional to the population placement.

Instrumentation. The needs assessment was designed as a quantitative study that used a series of Likert-scaled questions to collect information about members (see Appendix A). The instruments measured the sources of pressure in the work of educators (Cooper & Travers, 2012), teacher burnout (Horn & Schaufeli, 1998), teacher self-efficacy (Tschannen-Moran & Hoy, 2001), the resilience of teachers (B. W. Smith et al., 2008), perfectionism within participants (Stöber, 1998), and any coping strategies (Carver, 1997) that members were

currently using to manage stress. All the measurements were existing questionnaires compiled together to create the needs assessment.

Sources of stress. Cooper and Travers' (2012) Source of Pressure You Face in Your Job Questionnaire was used to assess the sources of work-related stressors. The questionnaire was used as written and consisted of 26 statements that participants rated on a 6-point Likert scale (from 1 = *Strongly disagree is a source of pressure* to 6 = *Strongly is a source of pressure*). The statements correlate with four major subscales of sources of pressure. The subscales included stressors intrinsic to the role (e.g., working long hours, completing administrative tasks, and poor working conditions), teacher's role within the organization (e.g., role ambiguity and role conflicts), organizational structure (the teacher's ability to participate in decision making and performance appraisal), and relationships (Cooper & Travers, 2012). Appendix D indicates the four subscales and the questions for each subscale.

Burnout. Burnout is the buildup of stress over time and can manifest as emotional exhaustion, depersonalization, and reduced accomplishment (Horn & Schaufeli, 1998). This construct was measured using the Maslach Burnout Inventory: The Dutch Educator Survey (Horn & Schaufeli, 1998). Horn and Schaufeli's (1998) Maslach Burnout Inventory: The Dutch Educator Survey was used as written to maintain the validity and reliability of the measurement. Confirmatory factor analyses were performed to test the factorial validity of the survey (Horn & Schaufeli, 1998). Based on the results, the validity of the survey can be considered adequate (Horn & Schaufeli, 1998). The predictive validity and discriminant and construct validity were also found to be adequate (Horn & Schaufeli, 1998).

The Dutch Educator Survey is a shorter version of the Maslach Burnout Inventory and measures the three subscales of burnout—emotional exhaustion, depersonalization, and personal

accomplishment (Horn & Schaufeli, 1998). Emotional exhaustion is a depletion of an individual's emotional resources. It is a feeling that one has nothing more to psychologically give to others (Horn & Schaufeli, 1998). Depersonalization is the development of negative attitudes toward others (Horn & Schaufeli, 1998). Finally, reduced personal accomplishment involves a negative evaluation of one's abilities (Horn & Schaufeli, 1998). This negative evaluation occurs when individuals perceive themselves as less effective in their job than their peers (Horn & Schaufeli, 1998). Appendix E shows the 22 statements that participants were asked to rank on a 6-point Likert Scale (1 = *never* to 6 = *always/every day*) and the subscales with which those statements correspond.

Coping strategies. Coping strategies are the ways that individuals cope with the stressors they experience in their roles. The Brief COPE questionnaire was used to assess the various strategies used by participants (Carver, 1997). This questionnaire included 14 statements that participants assessed on a 4-point Likert scale (1 = *I haven't been doing this at all* to 4 = *I've been doing this a lot*). The subscales included active coping (*I've been concentrating my efforts on doing something about the situation I'm in*), use of emotional support (*I've been getting emotional support from others*), behavioral disengagement (*I've been giving up trying to deal with it*), use of instrumental support (*I've been getting help and advice from other people*), positive reframing (*I've been trying to see it in a different light, to make it seem more positive*), self-blame (*I've been criticizing myself*), and planning (*I've been trying to come up with a strategy about what to do*).

Teacher characteristics. This portion of the questionnaire measured resiliency, self-efficacy, and perfectionism. Thus, three different existing instruments were used: the Frost

Multidimensional Perfectionist Scale Revisited (Stöber, 1998)m Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001)m and the Brief Resilience Scale (B. W. Smith et al., 2008).

The Brief Resilience Scale (B. W. Smith et al., 2008) and subsets of the Multidimensional Perfectionist Scale (Stöber, 1998) were combined for the needs assessments. For this portion of the needs assessment, participants assessed 20 statements on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Six of the statements derived from The Brief Resilience scale assessed a participant's ability to "bounce back" from difficult situations (B. W. Smith et al., 2008). Items 1, 3, and 5 were all positively worded, and the other three were negatively worded. Reverse coding is used on the negatively worded questions to combine all six questions and determine a mean for the overall resilience of participants (B. W. Smith et al., 2008). The Brief Resilience questionnaire included statements, such as "I tend to bounce back quickly after hard times," and "It does not take me long to recover from a stressful event." This questionnaire was combined with the Frost Multidimensional Perfectionist Scale Revisited (Stöber, 1998). This questionnaire consisted of 14 statements that measured participants' perfectionist tendencies along five dimensions: concern over mistakes, personal standards, parental expectations, parental criticism, and doubts about actions.

Only two subsets were evaluated to reduce the time necessary to complete the needs assessment: Concern Over Mistakes and Doubts About Actions. These two were chosen because they were the only dimensions that interventions from the researcher could impact. Concern over mistakes focuses on the impact of failure on an individual. This dimension was accessed using statements, such as "If I fail at work/school, I am a failure as a person," and "If I fail partly, it is as bad as being a complete failure." Doubt about actions is the extent to which an individual doubts their decisions. This dimension was accessed using statements, such as "I usually have

doubts about the simple everyday things I do,” and “It takes me a long time to do something right.” Of the 20 statements, six assessed resilience, five assessed doubts about actions, and the remaining nine assessed concern over mistakes.

Finally, self-efficacy was assessed using the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001). Self-efficacy is an individual’s belief in their abilities. This questionnaire consists of 12 questions that participants responded to using a 9-point Likert Scale (1 = *not at all* to 9 = *a great deal*). This questionnaire includes three subscales: efficacy for instructional strategies, classroom management, and student engagement. Efficacy for instructional strategies evaluates an individual’s perception of their ability to break down complex material for students. Efficacy for classroom management reflects the individual’s perception of their ability to regulate their classroom. Efficacy for student engagement measures a teacher’s perception of their ability to engage students and families in meeting learning outcomes. Appendix F shows the complete questionnaire organized by subscale.

Retention. Retention was measured using the participants’ self-reported commitment to staying in the classroom. Each participant was asked, “Do you intend to complete your 2-year commitment in Houston,” “Do you see yourself teaching beyond your 2-year commitment,” and “Do you see yourself teaching for 5+ years?” Each of these questions included the options of “yes” or “no.” Finally, since the literature noted differences in teachers who left the educational field completely versus those who searched for promotions within the educational field, participants were asked about their long-term goals. They provided the following options: lifetime teacher, school administration, educational roles outside of a school, and careers outside of education.

Data collection. Teachers affiliated with USTA taught in various schools and districts throughout the southern metropolitan region used in the study; the assessment was designed as an online survey. USTA granted permission to contact all the organization's current members in the Houston region via email. The organization supplied the email addresses to the researcher. All of USTA's members received an email from the researcher requesting their participation along with a link to a Google Form to recruit participants for the needs assessment (see Appendix B); the platform allowed the researcher to insert questions into a document and send a link to all participants so that they can complete the survey. The first page of the Google Form included a consent form that each participant could read and provide informed consent before continuing the survey and completing the study. The first page also provided information about the confidentiality and anonymity of the assessment. Appendix C includes the consent form. After providing consent, participants were prompted to answer 104 questions about themselves and their experience as novice teachers. The responses were then analyzed in SPSS to identify trends and potential conclusions.

Findings

Initial summary of results. The data-collection process yielded the following conclusions organized by research questions:

Needs Assessment Research Question 1. NARQ1 was the following: What are the self-reported plans for the participating novice teachers after completing their 2-year service? Most participating novice teachers seek other education roles such as administration, educational policy, or education non-profit organizations. For the long-term plans of the participants, 6.5% want to be lifetime teachers ($n = 3$), 10.9% indicated a desire to become a school administrator ($n = 5$), 41.3% would like to hold an educational role outside of a school setting ($n = 19$), and the

remaining 41.3% are interested in occupations outside of education ($n = 19$). Table 2 illustrates the intentions to leave the classroom upon completion of commitment, teach beyond 2 years, and teach beyond 5 years by school setting and years of teaching experience. Thus, less than 7% desired to stay classroom teachers, with the bulk (52%) wanting other roles in education and a substantial portion (41%) desiring to transition to other professional careers.

Table 2

Self-Reported Persistence in the Classroom

	Overall ($n = 46$)	Elementary ($n = 18$)	Middle ($n = 23$)	High ($n = 5$)	First-year teachers ($n = 25$)	Second- year teachers ($n = 21$)
Leaving after completion of 2-year commitment	34.8%	27.8%	36%	40%	32%	33%
Teach beyond 2 years	77%	72%	58.8%	60%	68%	66.7%
Teach beyond 5 years	26%	27.78%	35.5%	20%	24%	28.57%

Needs Assessment Research Question 2. NARQ2 was the following: What are USTA’s members’ sources of pressure in their role? The highest source or pressure in their jobs were stressors intrinsic in their roles which averaged a 4.44 rating on the 6-point Likert scale. The other sources of stressors that were assessed included building relationships (average = 3.46), factors related to the role ambiguity or conflict (average = 3.39), and factors related to the organizational structure (average = 3.85).

When considering the subscales of burnout, most teachers experienced emotional exhaustion, meaning they believed they had no more to give psychologically. The teachers’ emotional exhaustion had an average of 4.04 on a 5-point Likert scale. The other dimensions of burnout had lower responses, with depersonalization having an average of 2.68 and reduced personal accomplishment averaging 3.43.

Table 3

Average Responses by Subscales of Participant's Sources of Pressure and Burnout

Responses	Subscales	Overall (n = 46)
Sources of pressure in their roles	Stressor intrinsic in their roles	4.44
	Building relationships	3.46
	Role ambiguity/conflict	3.39
Subscales of burnout	Organizational structure	3.85
	Emotional exhaustion	4.04
	Depersonalization	2.68
	Reduced personal accomplishment	3.43

Needs Assessment Research Question 3. NARQ3 was the following: What coping strategies are USTA members currently using to manage their stress? Members indicated that they used coping strategies equally, except for behavioral disengagement, which averaged 1.8 on the Likert scale. The other subscales of coping strategies all had an average rating of approximately 3 on the 4-point Likert scale.

Table 4

Average Use of Various Coping Strategies by Participants

Strategies	Overall (n = 46)
Active coping	3
Use of emotional support	3
Behavioral disengagement	1.8
Use of instrumental support	3
Positive reframing	3
Self-blame	3
Planning	3

Needs Assessment Research Question 4. NARQ4 was the following: What teacher characteristics (self-efficacy, perfectionism, resilience-building) are prevalent in USTA members who plan to teach for 5 or more years? The data for participants who planned to teach for five or more years indicated patterns of higher self-efficacy. Of the 12 participants who self-reported a

desire to teach for five or more years, there were trends of higher self-efficacy in all three subscales (Efficacy for Instructional Strategies = 6.81, Efficacy for Class Management = 7.33, Efficacy for Student Engagement = 6.88). Patterns of perfectionism indicated slightly lower perfectionist tendencies (Concerns over Mistakes = 2.56, Doubts about Actions = 2.42).

Resilience did not indicate trends between participants who indicated a desire to persist and those who did not. However, there was a pattern when examining burnout. Participants who indicated a desire to persist beyond five years showed lower indications of burnout for all three subscales (Emotional exhaustion = 3.46, Depersonalization = 2.26, Reduced Personal Accomplishment = 3.41).

Participants who indicated that they would teach for five or more years were predominately female except for one. Only one was a high school teacher. The racial breakdown of this group was not proportional to the overall population (White = 41.7%, Latinx X/Hispanic = 25.1%, Black = 33.2%).

Discussion

Findings from the needs assessment indicate areas of growth for USTA related to the persistence of USTA members and persistence in urban schools. Teacher self-efficacy (Rockoff, 2004) and burnout (Fitchett et al., 2018) were the two most correlated to the participant's self-proclaim intent to persist in the classroom. The results of the needs assessment align with that of the literature synthesis. The participants who indicated a desire to persist in the classroom for five or more years had higher self-efficacy. A teacher's self-efficacy is positively correlated with job satisfaction and persistence (Canrinus et al., 2012). If teachers perceive their performances as successful, they are likely to have higher self-efficacy; thus, they will persist in the classroom (Bandura, 1986). Although most studies indicated that self-efficacy was a primary mitigator of

occupational stress, Ouellette et al. (2018) found that the organization's perception had more of a significant correlation. However, the needs assessment found that organizational structure and resources had the least impact on job satisfaction and occupational stress.

The study results indicated that the predominant source of stress in their roles was tied to responsibilities intrinsic to their roles and that most participants experienced emotional exhaustion. This finding aligns with aspects of the novice teacher experiential cycle (Olson & Osborne, 1991) and occupational stress (Anbazhagan & Rajan, 2013). Novice teachers experience job difficulty and role ambiguity because they are unfamiliar with the expectations and find difficulty performing tasks due to inadequate training or a sense of not knowing (Anbazhagan & Rajan, 2013; Olson & Osborne, 1991). For example, when viewing research on the impact of standardized testing, a responsibility intrinsic to the role of a teacher, high-stakes testing has a negative correlation with teacher retention (Hill & Barth, 2004). The majority expressed pressure and stress around testing, including feeling helpless when students were not showing progress (Shernoff et al., 2011). In Gottlieb's (1964) study, teachers indicated large class sizes, lack of resources, and discipline as main contributing factors to their occupational stress and job dissatisfaction. These are also tasks intrinsic to the role of an educator.

Lastly, over half of the participants in the needs assessments were seeking other administrative roles in education after their 2-year commitment. This finding aligns with national data as the Teacher Follow-Up Survey indicates that most leavers desired to pursue fields other than classroom teaching (Ingersoll, 2001). Theobald (1990) found that teachers with higher educational attainment were less likely to persist in their roles. Teachers with high college degrees tend to select roles outside of education. The researcher suggested mandating higher educational attainment to alter the perception of teaching (Theobald, 1990). Theobald (1990)

believed that society's view of being just a teacher made the role less desirable as a career, causing educators to flee the classroom in search of senior leadership or more affluent and prestigious roles. The data from the needs assessment indicated similar findings, with less than 7% of participants ($n = 3$) indicating a desire to be lifetime teachers and the majority indicating interests in administration or policy ($n = 24$) or outside of education completely ($n = 19$).

Limitations

There are some limitations to the needs assessments related to the methods and population. The study was strictly a quantitative design; thus, the research is limited to numerical data and neglects the participants' narrative (Lochmiller & Lester, 2016). Follow-up with participants about the data analysis could serve as a form of participant triangulation (Lochmiller & Lester, 2016) and member checking (Guba, 1981). Although the study aligned with the literature, indicating theory triangulation (Lochmiller & Lester, 2016), member checking and triangulating the data would increase the internal validity of the data (Lochmiller & Lester, 2016). Additionally, the study was conducted with a sample size of 46 participants. Lochmiller and Lester (2016) suggested a sample size of 100 or more to establish external validity, thus ensuring the study was generalizable in other contexts. Additionally, the demographics of the participants in the study did not mirror that of the overall USTA membership, specifically when looking at ethnic breakdown, which is an indication that the sample validity is limited (Lochmiller & Lester, 2016).

This needs assessment was given at the end of the school year. This time had a high concentration of field trips and test preparation. Given the nature of the part of the year in which participants were assessed, their responses about their stressors and their experience with burnout may have been affected. Collecting data during various portions of the school year or conducting

a time-series data collection study would be helpful (O. D. Anderson, 1975). Additionally, retention was measured by self-reported commitment rather than actual retention data. Further tracking of this group of participants would be beneficial to study actual retention to strength construct and content validity, ensuring that what was measured aligns with the intended measure.

Summary

The needs assessment results indicate that most novice teachers do not plan to teach for five or more years. Almost half have long-term career plans that will take them out of the educational landscape. When analyzing contributing factors to the retention, novice teachers are experiencing emotional exhaustion within their roles (Barrett et al., 2002; Olson & Osborne, 1991). A major contributing factor to their stress is the factors intrinsic to teaching in an urban school setting: lack of resources, dealing with behaviors, administrative tasks, low salaries, and a constantly changing environment (Ingersoll, 2001). These factors were outside of the researcher's locus of control. The researcher designed professional development opportunities that catered to building novice teacher skills and mindsets. The needs assessment indicated the participants who proclaimed a desire to teach for five or more years showed a higher self-efficacy and lower indications of burnout. Thus, the researcher believed that it was beneficial to explore previous interventions centered on building stronger teacher self-efficacy and decreasing burnout or attrition.

Chapter 3: Interventions to Address Teacher Retention

This literature review examines previous interventions related to novice teacher attrition. Researchers at the Buffet Early Childhood Institute developed a framework of teacher well-being which, like the EST (Bronfenbrenner, 1976), indicates that teacher wellness is not only influenced by individual factors but also by contextual factors, such as the organization, practice environment, social and cultural influences, and professional regulations and policies (Gallagher, Roberts, & Rousseau, 2018). This framework was adapted from Brigham et al. (2018), which focused on the well-being and resilience of clinicians. Both researchers noted that previous interventions for decreasing occupational stress and increasing wellness for clinicians and teachers had focused more on the individual factors because they are more easily treatable (Brigham et al., 2018; Gallagher et al., 2018). The previous interventions have focused less on contextual factors, such as conditions within the workplace and policies within the education system (Gallagher et al., 2018). This finding puts the onus of occupational stress on the educator, and the root cause of the stress remains unaddressed (Roberts & Kim, 2019).

The needs assessment concluded similar findings. The survey results showed that the factor with the most significant correlation to high burnout and exhaustion among the participants was intrinsic to an educator's role. Additionally, the needs assessment showed that participants who intended to persist in the classroom had higher self-efficacy and lower burnout data. The literature synthesis also reveals that higher teacher self-efficacy correlated with lower measures of stress or higher persistence. Self-efficacy increases a teacher's receptiveness to change in the workplace (Tschannen-Moran et al., 1998). Reciprocally, as teachers gain new knowledge or execute new practices successfully, their self-efficacy increases (Tschannen-Moran et al., 1998). Thus, this literature review seeks to explore interventions that explore

changes in organizational factors or changes in teacher mindset as a means to increase teacher self-efficacy. The conceptual and theoretical frameworks that undergird this work will be explained next.

Theoretical Framework

Professional development situated in sociocultural theory is most likely to increase teacher self-efficacy (Raphael, Vasquez, Fortune, Gavelek, & Au, 2014). Sociocultural theory is grounded in the constructivist paradigm (Gee, 2008). Theorists believe that development is a dynamic process that occurs through an individual's interactions with people and tools within their social, cultural, and professional environments (Vygotsky, 1979). Vygotsky (1979) studied the language acquisition patterns of children and noted that children's speech emerged from connections to their social environments. Over time, their languages, cultures, and social interactions shaped their perceptions of the world. The sociocultural theory also applies to novice teacher development within school environments partly influenced by their relationships with colleagues.

Vygotsky's (1979) sociocultural theory centers around two concepts: the more knowledgeable other (MKO) and the zone of proximal development (ZPD). The MKO is an individual with a better understanding or higher ability level than the learner (Vygotsky, 1979). In education, the MKO other is often perceived as the teacher but could appear as a student, a peer, a colleague, or a technological tool. The ZPD refers to the difference between what a learner can learn on their own and what can be achieved with the guidance and motivation of the MKO (Vygotsky, 1979). Vygotsky (1979) theorized that the ZPD was the area where instruction and guidance should be provided to the learner, allowing them to develop skills they would eventually use on their own.

As sociocultural theory expanded, theorists have added that access to learning takes place through the help of peers within the same field, collaborating toward a common goal (Raphael et al., 2014). The learner's interaction with more skillful peers through cooperative learning effectively develops skills and new knowledge (Vygotsky, 1979). Thus, professional development opportunities should allow teachers to interact with small groups to practice inquiry and problem solving (Raphael et al., 2014). According to Resnick (1987), when individuals are allowed to learn, the experiences should be rooted in society's economic, civic, and cultural realm and push the individual to be a life-long learner concerning their work. As a means of connecting in-school and out-of-school learning, the learning experiences should allow the learner to engage in problem-solving scenarios rooted in the real-world application to utilize their previous schema to engage with peers (Resnick, 1987). During the problem-solving process, learning occurs (Resnick, 1987).

Learning is impeded within the sociocultural theory when the individual's environment or experiences are culturally oppressive (Gee, 2008). Learning experiences should value differences and invite the perspectives of multiple voices (Lim & Renshaw, 2001). Learning experiences rooted in sociocultural theory critically examine the experience that will support teachers' development in diverse communities and creating diverse and affirming communities for staff. Within this framework, teachers reflect on their own identities to create learning environments that affirm the identities of their students (Lim & Renshaw, 2001).

Lave and Wenger (1991) added to the literature on sociocultural theory by developing the concept of communities of practice (CoP). CoPs are groups of individuals who are active practitioners in a shared field that learn and develop within that interest through regular interactions with one another (Lave, 1991). Through the process of sharing experiences and

information, the members of the CoP develop and learn (Lave, 1991). CoPs require collaboration and engagement so that learning develops through legitimate peripheral participation. Legitimate peripheral participation describes the process by which a novice practitioner enters the CoP as an active participant who engages in low-risk tasks. Through peripheral activities, one becomes more knowledgeable and experienced, acquiring identities of mastery. Given the changes in technological advances, Dubé, Bourhis, and Jacob (2005) studied 14 different organizations that implemented 18 different virtual CoPs. The researchers examined the organizations' existing documents, logs, and focus group transcripts on examining the effectiveness of the virtual approach to CoPs. Dubé et al. (2005) concluded that the success of a virtual CoPs, or its ability to meet its intended outcomes, was rooted in the degree to which the virtual CoPs were embedded in the organization's structure.

Throughout this literature synthesis, the theoretical framework serves as the philosophical approach to evaluating all the interventions. All the interventions explored should be situated in the participants learning through experiments situated in their environment. Figure 4 shows how knowledge and development are situated in the sociocultural theory.

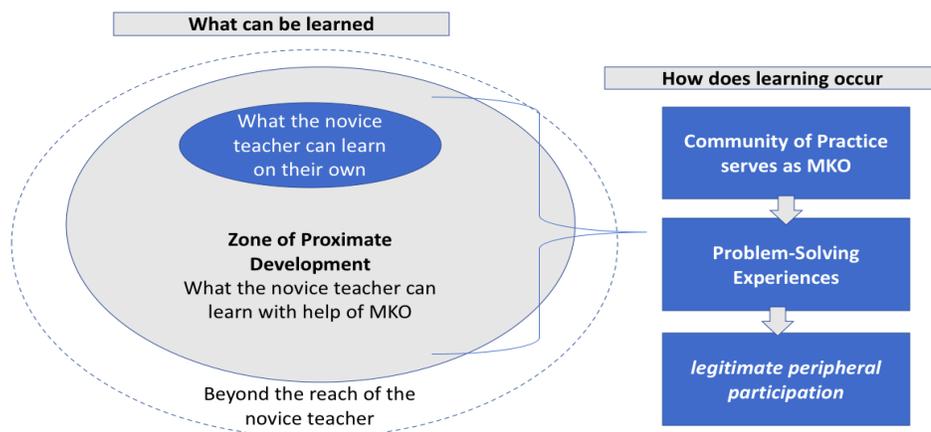


Figure 4. Researcher's proximal representation of theoretical framework.

The concept of legitimate peripheral participation aligns with research on building self-efficacy. The literature review and needs assessment affirms that self-efficacy is positively correlated with teacher retention and job satisfaction (Canrinus et al., 2012; Johnson & Birkeland, 2003; T. M. Smith & Ingersoll, 2004; Stockard & Lehman, 2004) and serves as a mitigator of stress and burnout (Brouwers & Tomic, 1999). One of the main influences on self-efficacy is vicarious experiences (Bandura, 1977). Vicarious experiences are when an individual sees a peer they closely identify with successful performances (Bandura, 1977). In a CoP, as a learner hears from the experiences of their peers or even the MKO, they can envision themselves being successful (Bandura, 1986).

Additionally, a sense of authority or autonomy increases self-efficacy (Ouellette et al., 2018). Teachers develop a sense of ownership and autonomy when they propose problems or suggest areas of development (Calvert, 2016). CoPs that dissolve power hierarchies and rely on the power of the group using liberatory practices are stronger transformative learning spaces (Barton & Tusting, 2005; Lave & Wenger, 1991). Thus, allowing participants to create their own learning experiences and engage in collaborative problem-solving from their own proposed problems will strengthen the CoP and increase self-efficacy. Building autonomy and a sense of ownership increases self-efficacy and beliefs in their abilities to fulfill their role (Calvert, 2016), decreases their experience with occupational stress (Pepe & Addimando, 2013), and leads to persistence in the classroom (Corcoran, 1981).

Self-efficacy is impacted by vicarious experiences, verbal persuasion, mastery experiences, and physiological and affective states (Bandura, 1986). Mastery experiences are past performances that impact one's perception of an ability to accomplish a role's tasks (Bandura, 1977). In other words, a teacher's self-efficacy becomes stronger if they experience

previous success in their role, and conversely, if they experience perceived failure (Tschannen-Moran & Hoy, 2007). Verbal persuasions are the messages that a teacher receives about their performance from others (Bandura, 1977; Tschannen-Moran & Hoy, 2007). Vicarious experiences are when an individual sees someone they believe to be successful, allowing that individual to envision themselves as being successful (Bandura, 1977; Tschannen-Moran & Hoy, 2007). Lastly, psychological and emotional arousal is the feeling of joy a teacher gets from teaching (Tschannen-Moran & Hoy, 2007).

This intervention literature synthesis would evaluate interventions by believing that learning was situated in experiences through the sociocultural theory. The researcher believed this framework would increase the self-efficacy of novice teachers (see Figure 5). Additionally, the researcher used a practical framework to evaluate the methodological approach used in the various interventions. Figure 5 depicts the connection between the theoretical and practical frameworks as they increase novice teacher self-efficacy.

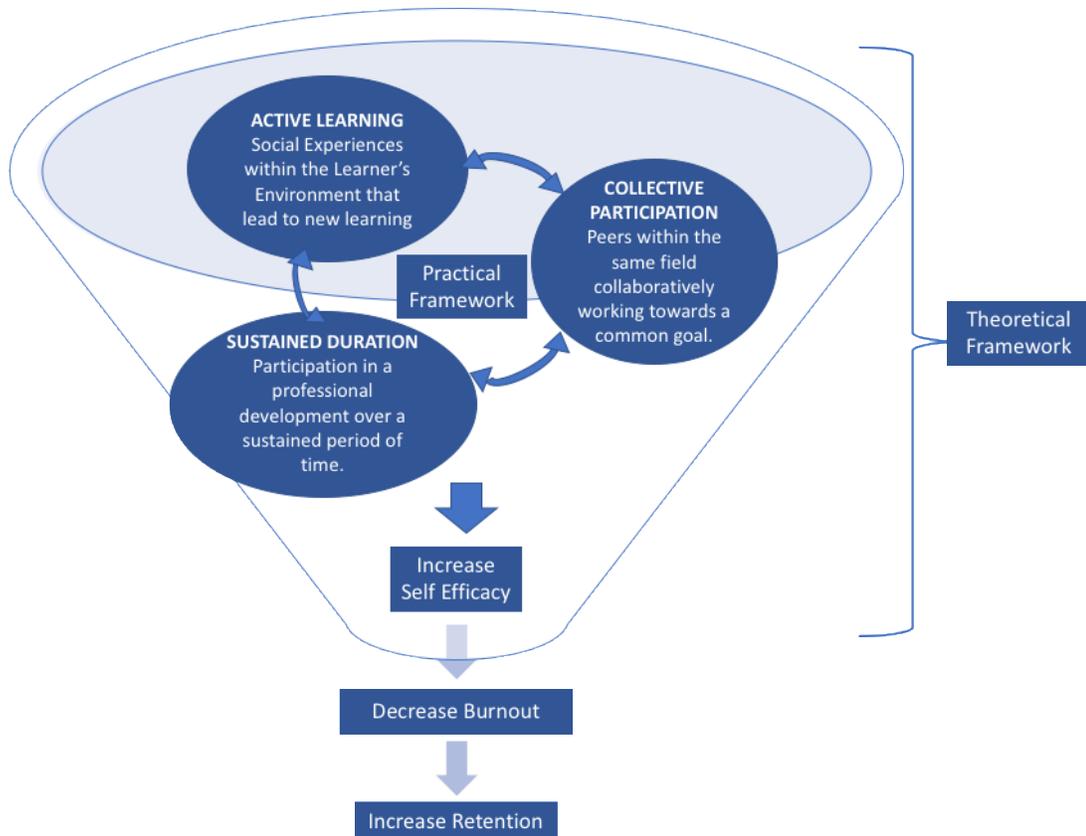


Figure 5. Connection between theoretical and practical frameworks.

Practical Framework

Without the addition of a practical framework, the findings of a study are rooted in scholarly discourse and stripped of the day-to-day practice (Lester, 2005). Utilizing a theoretical and practical framework allows a researcher to combine theoretical perspectives and practitioner explanations (Lester, 2005). For this literature review, structures for strong professional development are used as a guide for evaluating previous interventions that address novice teacher burnout, self-efficacy, and retention.

The process in which teachers, especially novice teachers, learn and implement change should be considered when planning professional development experiences (Guskey, 1986). Desimone and Garet (2015) provided a model for strong professional development rooted in the

sociocultural theory. This model includes five features necessary for effective professional development opportunities: (a) content focus, (b) active learning, (c) coherence, (d) sustained duration, and (e) collective participation. Content focus means that professional development activities should focus on a specific content matter and how students learn within that content (Desimone & Garet, 2015). Active learning is the act of teachers actively engaging in their development through presenting, observing, and receiving feedback instead of passively listening to a lecture (Desimone & Garet, 2015). According to Desimone and Garet (2015), professional development should be coherent with the school curriculum and goals. Lastly, professional development should have sustained duration or be ongoing throughout the school year and involve the collective participation of teachers in activities to build interactive learning communities (Desimone & Garet, 2015). When focusing on teacher retention, self-efficacy, and occupational stress, this researcher wants to develop an active professional learning experience that is collective and sustained. These three features of effective professional development were chosen to evaluate the interventions in this intervention literature review. The researcher did not focus on a particular school content area, so the intervention was incoherent with one school curriculum or content area.

Collective participation. The sociocultural theory promotes using learning communities to acquire new knowledge (Lave, 1991; Raphael et al., 2014). Likewise, professional development standards, such as Learning Forward (2011), place professional learning communities (PLC), a type of community of learning, as a critical component of changing teacher mindsets and behaviors (Calvert, 2016). Learning communities are educators with a shared commonality who meet regularly to collaborate on professional development experiences (Desimone, L. M., & Stuckey, D., 2014). Educators who participate in a PLC consistently

engage in a collective inquiry process to achieve stronger outcomes in their roles and engage in job-specific learning (DuFour, DuFour, Eaker, Many, & Mattos, 2016). Collective inquiry is how educators build shared knowledge and learn together around their practices (Bierschenk & de Sardan, 1997). Researchers of collective inquiries aim for teachers to establish the question they want to answer, utilize new methods and best practices to address the question or problem, and transform their practices and beliefs (Bierschenk & de Sardan, 1997).

These learning communities provide a support system for participants (Learning Forward, 2011). PLCs are more impactful when teachers work together to solve problems that they are experiencing in their respective roles (Raphael et al., 2014). Putnam and Borko (2000) researched current practices around teacher professional development against Vygotsky's (1979) sociocultural theory, particularly focusing on the social and cultural formation of knowledge. Putnam and Borko (2000) argued that teachers need to be a part of a community of practice to support their development. PLCs should support teachers taking risks and utilizing new strategies to transform their practices by pushing teachers to reflect on their own and their peers' problems (Putnam & Borko, 2000).

Sustained duration. Sustained duration refers to teachers' need to consistently engage in professional development over an extended period (Desimone & Garet, 2015). Typically, professional development experiences are one-time conferences. After this one-time engagement, participants do not receive follow-up or opportunities to engage with the learning outcomes over time (Desimone, 2009). Without the sustained duration of learning experiences, it is impossible for teachers to achieve mastery and measure the outcomes (Learning Forward, 2011).

Active learning. Active learning aligns with the sociocultural theory as participants utilize their prior knowledge and current experiences to problem solve and build new learning (Vygotsky, 1979). Active learning is the process of learning through reflection and critical thinking (Desimone & Garet, 2015). Learning Forward (2011) asserts that learners must have the opportunity to engage with problem-solving, and discussing the new learning enables new mindsets and behaviors to form. The active learning process allows teachers to have autonomy as they are leading the design-to-feedback process of their learning experience (Darling-Hammond, Hyler, & Gardner, 2017). Blunck and Yager (1996) asserted that professional development for novice teachers must meet their specific needs by being personal and relevant to each learners' present needs. Active learning accomplishes this by putting the teacher in an active, passive role in their development and learning (Dagen & Bean, 2014). Additionally, active learning centers around autonomy. Having a sense of autonomy increases teacher self-efficacy (Calvert, 2016; Tschannen-Moran & McMaster, 2009).

Literature Review

This literature review examines previous interventions related to novice teacher attrition. Given the findings from the needs assessment, this intervention literature review centers on exploring interventions that may mitigate the impact of the factors intrinsic to the role of an educator or help build teacher self-efficacy to decrease the experience of occupational stress and burnout. The researcher used the sociocultural theory and principles of strong professional development (active learning, sustained duration, and collective participation) to fuel the evaluation of previous interventions as these practices correlate with increased self-efficacy.

Interventions that address organizational factors. The needs assessment revealed that the highest sources of stress for novice teachers were intrinsic to their roles and factors related to

the organizational structures. Changes in the structure of an organization, such as an increase in compensation or changing the workplace conditions, are not within the purview of change for this study nor align directly with the aspects of the sociocultural theory that frame this research. Because the needs assessment pointed to the organizational factors being the most significant contributor to novice-teacher stress, the researcher felt it was essential to learn whether interventions on the organizational level led to change in teacher self-efficacy, burnout, or retention. This literary synthesis revealed that organizational interventions that did not include elements of the practical framework failed to make statically significant changes in the examined constructs, which further support the researcher's intentions to focus on studies situated in the sociocultural theory.

Induction programs. Much research surrounds the impacts of teacher induction programs; however, many utilize weak research designs that make their findings unreliable (Mitchell, Howard, Meetze-Hall, Scott, & Sandlin, 2017). Ingersoll and Strong (2011) reviewed research literature surrounding teacher induction and certification programs. Induction programs are pre-service experiences that allow novice teachers to receive coaching from a mentor teacher before becoming full-time educators in their classrooms (Mitchell et al., 2017). In this study, a mentor is a veteran educator who supports the novice teacher through feedback and providing advice regarding emergent problems of practice.

Induction programs traditionally include feedback loops where the mentor teacher observes and provides the novice teacher with feedback on their performance ongoingly or a gradual release model where the novice teacher observes the mentor and slowly takes on more responsibilities in the classroom (Ingersoll & Strong, 2011). Both models allow the teacher to experience a sustained duration of learning because the teacher develops on each skill over time

(Desimone & Garet, 2015). Additionally, teachers engage with problem-solving and discuss the new learning in their debriefs with their mentors, which is an element of active learning (Desimone & Garet, 2015).

Ingersoll and Strong (2011) only identified 15 empirical studies on the impact of teacher induction and certification programs that met reliability standards. Ingersoll (2003) was one of the first researchers to study the impact of teacher induction programs on novice teachers. In Ingersoll's (2003) study and his collaborative study with Kralik (2004), the researcher concluded that induction programs that included practice, feedback, and reflection cycles coupled with mentors or coaches reduced the likelihood that teachers would leave the teaching profession within the first five years. Given Ingersoll's (2003) pioneering work, this researcher believed it was important to explore the impact of induction and certification programs on novice teachers. One of the studies Ingersoll and Strong (2011) reviewed was Carr and Evans (2006).

Carr and Evans (2006) studied the effectiveness of Southeastern Louisiana University's induction program, Teacher Scholars Program (TSP), in response to Louisiana's difficulties retaining novice teachers. As a participant in this program, teachers worked as full-time teachers. The university employed them through a contract with participating school districts and received mentors employed by the participating school districts (Carr & Evans, 2006). The mentors were current teachers. The TSP students take over their mentor's classroom; thus, mentors are released from teaching responsibilities. The mentors observed the TSP students for a minimum of six hours a week and offered feedback, model teaching practices, and provided context about the school and district (Carr & Evans, 2006). The researchers conducted a longitudinal study of the effects of the program over seven years. During the study, 54 participants earned their master's degrees, and four participants withdrew from the program (Carr & Evans, 2006). Of the 70

participants, 63 remained in the profession. Carr and Evans (2006) provided participants with a survey after each academic year to assess their opinions of the program and the impact the program has had on their work. Given their data analysis, the researchers believed that (a) sustained support from a mentor was critical to the beginning teacher retention, and (b) a master's degree program increased teacher performance. This intervention showed an increase in retention, which the researchers connect to the sustained duration component of the induction program.

Conversely, Glazerman et al. (2010) revealed contradictory conclusions in their study on the impact of comprehensive teacher induction programs on the retention of novice teachers in the workforce. The researchers conducted a randomized field experiment in a set of districts that had not formally implemented comprehensive induction programs (Glazerman et al., 2010). The study took place in 418 elementary schools in 17 urban districts across 13 states (Glazerman et al., 2010). Schools were randomly placed into a control group that received the district's routine induction services, simply pairing the novice teacher with a veteran teacher at the school or a treatment group that received a comprehensive induction provided by Educational Testing Service of Princeton, New Jersey, or the New Teacher Center at the University of California, Santa Cruz (Glazerman et al., 2010). The programs provided participants with trained mentors who were full-time teachers, a curriculum of professional development geared toward novice educators, and formative assessment tools (Glazerman et al., 2010). The researchers found that neither exposure to one year nor more than two years of the induction program positively impacted teacher retention (Glazerman et al., 2010).

Additionally, teachers in the treatment group did not report more satisfaction with their roles than their peers in the control group during any of the surveys conducted six times over

four academic years (Glazerman et al., 2010). In this version of an induction program, although time was increased, the feedback elements are unclear. It is difficult to determine if teachers were experiencing a sustained duration of feedback cycles from their mentor or simply experiencing a series of isolated professional development experiences on various topics, which research suggests is ineffective (Learning Forward, 2011).

Similarly, Silva, McKie, Knechtel, Gleason, and Makowsky (2014) studied the effects of a teacher residency program on novice teacher retention. In a residency program, individuals with a bachelor's degree work to obtain their alternative certification by completing coursework and gaining supervised fieldwork experience for one academic year while teaching (Silva et al., 2014). This structure gives the resident an ability to practice instructional strategies and increase their teaching responsibility under the supervision of an experienced teacher in the urban school that the resident will be hired (Silva et al., 2014).

Silva et al. (2014) studied 30 teacher residency programs that received grant funding. The researchers used a comparative group of non-residency participants in the same districts served by the participating residents (Silva et al., 2014). Silva et al. (2014) found that 92% of residency teachers and 90% of non-residency teachers in their first- or second-years teaching remained in the classroom for the following academic year. Additionally, 4% of residency teachers and 6% of non-residency teachers left the teaching profession (Silva et al., 2014). Thus, the researchers concluded no statistical difference in retention among participants and non-participants in the residency program (Silva et al., 2014). Overall, the research on induction programs does not indicate a significant connection to increasing teacher retention.

Workplace conditions. Research indicates that work-related stress derives from job demands and resources (Schelvis et al., 2017). Organizational level changes center around

changing the stressors in the workplace rather than the employee's response or mindsets around the stressors (Schelvis et al., 2017). Researchers Shirrell and Reininger (2017) added to the research of Silva et al. (2014) and Sokal, Woloshyn, and Funk-Unrau (2013) by studying the correlation between the working conditions of a student-teaching school site and student teacher's planned persistence. The study centered around a large urban school district. Student teachers within the district were provided with an online survey at the beginning and end of each semester during their first year. The results of the survey revealed that working conditions were meaningful predictors of student teachers' planned persistence. As the working conditions improved, persistence increased. Twenty-seven percent of participants in the most challenging working conditions stated plans to leave their school site. In contrast, only 18% of participants with the least challenging conditions expressed a desire to leave. Additionally, participants in schools with higher teacher persistence overall were more likely to remain in their roles.

Likewise, Schelvis et al. (2017) studied the impact of organizational-level change on reducing burnout. Secondly, an increase in the self-efficacy beliefs of the target group should be an outcome of the intervention. Two vocational education and training schools in the Netherlands chose to participate in the intervention. The intervention consisted of two phases that each span 12 months. In the first phase of the intervention, the facilitator conducted a needs assessment where participants developed actions that could lead to a happy and healthy work-life. The findings from the needs assessment led to the facilitator's advice to the management team for an intervention that included activities like creating a staff room or implementing an employee assessment policy. The results indicated no significant intervention effects on those who experienced the workplace environment changes over the control group; the only indicators with significantly different effects were organizational efficacy and absorption (a subscale of

work engagement; Schelvis et al., 2017). This intervention did not uphold any effective teacher professional development (Desimone & Garet, 2015). Instead, it focused on a change in the organizational context without any development for the teacher, and the results show no change in burnout nor self-efficacy. This study provides further credence for the focus on teacher professional development rather than changes to the environment.

Compensation. Chapter 1 reviewed research on the positive correlation between teacher compensation and retention (Baugh & Stone, 1982; Theobald, 1990). Many school district leaders have experimented with financial incentives, such as bonuses or loan forgiveness programs, to increase retention (Springer, Swain, & Rodriguez, 2016). For example, Tennessee implemented a \$5,000 retention bonus program for effective teachers in their priority schools (Springer et al., 2016). Using a regression discontinuity design analysis, the researchers concluded that teachers who did not teach a subject that was tested by the state did not experience a change in retention; however, for those who taught state-tested subjects, the bonus program had a statistically and substantively significant positive correlation with retention (Springer et al., 2016). The researchers associated this difference with the state's effective teacher rating system's value on student achievement data (Springer et al., 2016). In this model, teachers are rewarded for their performance which is a form of verbal persuasion; thus, potentially increasing their self-efficacy.

Rather than performance-based metrics, several teacher recruitment programs, such as City Year and other AmeriCorps organizations, utilize educational grants or loan forgiveness as an incentive. City Year provides participants with an AmeriCorps Segal Award as an educational grant that can be used to pay off loans or to pay for tuition (City Year, 2020). Currently, the Segal Award is a \$6,195 grant (Corporation for National and Community Service, 2020).

Additionally, under the Teacher Loan Forgiveness Program, if a teacher teaches full time for five consecutive years in a low-income school, they can be eligible for forgiveness of up to \$17,500 on their direct subsidized and unsubsidized federal loans (U.S. Department of Education, 2020).

Some district leaders have used loan forgiveness as a method of staffing high-needs areas. One of the longest-running programs is Florida's Critical Teacher Shortage Program (FCTSP). Feng and Sass (2018) studied the effects of this program to gauge the effectiveness of non-wage compensation programs. Under the FCTSP, teachers could get up to \$10,000 of their student loan debt paid if they continued teaching in high-need subject areas (Feng & Sass, 2018). Additionally, \$1,200 one-time bonuses were offered to teachers in specific subjects and grade levels. The researchers used existing teacher retention data, limiting their analysis to teachers who taught their first year in Florida and had not spent more than five years teaching in another state. Using a difference-in-difference model, the researchers compared changes in retention when a subject is on the critical shortage list to changes in retention over time for teachers who taught subjects that were ineligible. Controls were used to account for time-invariant differences in retention across subject areas and variance in yearly trends in the teacher labor market (Feng & Sass, 2018).

Feng and Sass (2018) concluded that the loan forgiveness aspect of the FCTSP had a substantial positive effect on teacher likelihood to persist. They noted that the impact varied based on the subject and the payment amount. Specifically, positive effects were found for science, math, foreign language, and special education teachers. As for the one-time bonus, it decreased teacher attrition in the targeted subject areas by 25%. The researchers suggested that the one-time payments are more cost-effective than loan forgiveness and reduce teacher attrition more than loan repayments (Feng & Sass, 2018). The researchers found that a small one-time

payment of \$500 to \$1,000 annually could reduce attrition, noting that for special education, payments of \$2,500 appeared more effective (Feng & Sass, 2018).

Interventions that address teacher skill. Another approach to teacher retention is interventions that address changes in the teacher's skill set. These studies typically center on teacher mindsets, perceptions, and behaviors regardless of the school and district characteristics (Curtis, 2012). Some researchers focused on building teaching skills in novice teachers to increase their self-efficacy (Curtis, 2012). The interventions below center around increasing teachers' abilities to perform tasks to increase their mastery experiences, which Bandura (1977) outlined as one of the four approaches to increasing self-efficacy.

Content knowledge development. Ross and Bruce (2007) developed a professional development program that sought to increase the self-efficacy of math teachers by improving their skills around content delivery. The professional development consisted of one full day of training and three 2-hour after-school training focused on communicating mathematics ideas where facilitators modeled standards-based math teaching strategies (Ross & Bruce, 2007). After each session, teachers were tasked with applying the teaching principles in their classroom, collecting student artifacts, and bringing those articles to the following session to reflect on the experience with peers. The goal was for this development to touch on all four components of self-efficacy (Ross & Bruce, 2007): mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

Ross and Bruce (2007) used 12 items from the Teachers' Sense of Efficacy Scale (Hoy & Woolfolk, 1993) to study the impact of professional development on self-efficacy. The survey had four items from the efficacy for engagement subscale, teaching strategies subscales, and student management subscale (Ross & Bruce, 2007). Ross and Bruce (2007) found that the

treatment teachers had higher self-efficacy than the control teachers on three subscales; however, the only statistically significant one was the efficacy for classroom management. The researchers concluded that future professional developments should explicitly address teacher cognition, particularly their self-efficacy, as it is a crucial determinant of creating confident and resilient teachers who persist in the classroom (Ross & Bruce, 2007).

Behavior management. Oakes, Lane, Jenkins, and Booker (2013) also studied the effects of professional development geared toward teacher self-efficacy; however, this professional development centered around behavior management rather than content knowledge. Schools participating in the study spent an academic year training in a comprehensive, integrated three-tiered model of behavior prevention (Oakes et al., 2013). Participating schools were in their first years of implementing their three-tiered behavior management model during the study (Oakes et al., 2013). Eighty-six middle school teachers at the participating Title 1 schools in a Southern state were surveyed using the Teachers' Sense of Efficacy Scale 24-item Long Form (Tschannen-Moran & Hoy, 2001) and the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996) at the end of the school year. Based on the results, the researchers found that three-quarters of the teachers in high-implementing schools, or schools that implemented the program with all teachers, experienced moderate to high levels of emotional exhaustion, less than one-third experienced depersonalization, and less than 10% experienced low personal accomplishment. So, although teachers were exhausted, they felt personally accomplished. The study also showed lowered depersonalization. When examining self-efficacy, there was no difference in measures between teachers at high-implementing and low-implementing schools.

Interventions that address teacher mindsets. The needs assessment revealed high levels of burnout in the participating teachers. Moreover, teachers expressed high levels of

emotional exhaustion or the depletion of emotional energy. However, stronger self-efficacy and job satisfaction mitigate an individual's experience with all three dimensions of burnout (Brouwers & Tomic, 1999; Herman et al., 2018). The interventions in this section examine interventions that support physiological or emotional arousal, feeling of joy a teacher gets from teaching (Tschannen-Moran & Hoy, 2007) as a means of increasing self-efficacy and decreasing burnout.

Mindfulness-based stress reduction. Mindfulness-based stress reduction can help individuals cope with various conditions and stressors (Gold et al., 2010). It is based on training attention using meditation techniques (Gold et al., 2010). The process seeks to change an individual's mindsets around stressful thoughts or events by decreasing the emotional reaction and increasing their cognitive evaluation. Gold et al. (2010) provided training for teachers in a suburban primary school to learn about mindfulness techniques and subsequently train their peers. All of the participants shared that they were experiencing stress and had no previous experience with meditation (Gold et al., 2010). Participants took an 8-week course taught by a psychotherapist and an experienced mindfulness-based stress reduction teacher (Gold et al., 2010). The 2.5-hour course took place weekly (Gold et al., 2010). Additionally, participants attended a 5-hour Saturday session between Weeks 5 and 6 (Gold et al., 2010).

Before experiencing mindfulness training, the pre-survey showed that most teachers were suffering from emotional distress; all 11 participants scored above the clinical threshold of depression (Gold et al., 2010). Gold et al. (2010) noted that the small sample size made it impossible to conclude distress in teachers as an occupational group or if this subset was atypical. Due to participating in the mindfulness training, most participants experienced reduced stress, anxiety, and depression (Gold et al., 2010). Only four participants scored in the clinical

range on any subscales, two of which reported mild stress (Gold et al., 2010). All but one participant improved. The researchers attributed the lack of improvement in this participant to a negative life event experienced by this person while participating in the study (Gold et al., 2010).

CALMERSS is another teacher mindfulness program that aims to decrease teacher stress. M. J. Taylor (2018) studied the impact of the multi-model program on enhancing teacher well-being. Five teachers in Australia were engaged in the four-week program (M. J. Taylor, 2018). The session included ice-breaking activities, an educational component that included direct instruction and small group discussions on mindfulness activities to help participants relax, exercise, resolve conflict, and cognitive training to work on automatic thoughts (M. J. Taylor, 2018). The five teachers received questionnaires at the beginning of the first session and the end of the final session (M. J. Taylor, 2018). Additionally, teachers received workbooks to record their sleep habits, faulty thinking, thoughts, and exercise (M. J. Taylor, 2018).

M. J. Taylor (2018) concluded that four of the five participants exhibited depressive symptoms and following the intervention, only one of the five participants was exhibiting symptoms. Additionally, the intervention reduced the level of psychological strain or the feeling of depression, anxiety, or irritability. M. J. Taylor believed these findings support the notion that individuals could alter their mental states through mindfulness activities, even if the environment did not change. The small population size inhibits the study's generalizability and replication (M. J. Taylor, 2018).

Employee wellness programs. Page and Vella-Brodrick (2013) examined how the workplace could be a channel to employee well-being. Personal and psychological well-being is the presence of positive feelings and functioning. The researchers studied the impact of a 6-week Working for Wellness Program on the personal and psychological well-being of 50 employees at

a large government agency in Australia. Participants in the intervention group attended weekly 1-hour small group sessions. The topics of the sessions included defining workplace well-being, understanding their strengths and how to apply them to their roles, goal setting, work-life balance, optimizing relationships in the workplace, and a cumulative session. Participants in the intervention group received resource packs with background information on the theories used in the study and activities to complete post-sessions. Participants completed a pre- and post-survey and engaged in focus groups one year post-program (Page & Vella-Brodrick, 2013).

Participants indicated that they learned a lot during their time in the program and perceived a positive change in their general well-being (Page & Vella-Brodrick, 2013). The study results showed a statistically significant increase in the psychological and subjective well-being of participants in the intervention group compared to the control group (Page & Vella-Brodrick, 2013). According to the results of a mixed-method ANOVA, there was no significant time by group interaction for general work-related wellbeing; however, participants in the intervention group expressed that they experienced more positive work-related well-being than the control group (Page & Vella-Brodrick, 2013).

Qualitative data from the focus group suggests that the program positively influenced the self-awareness and self-acceptance, work-related relationships, positive mindsets and feelings, and goal attainment of participants (Page & Vella-Brodrick, 2013). Participants named the content of the program and the strength-based activities as the biggest strengths of the program, particularly the opportunities for the whole group and partner discourse (Page & Vella-Brodrick, 2013). The focus group indicated that intervention participants had difficulties applying what they learned in the workplace due to a lack of role clarity and autonomy in their roles (Page & Vella-Brodrick, 2013). Participants made suggestions for continuing support using manager

training and peer-support groups (Page & Vella-Brodrick, 2013). Overall, the study results indicate that positive change in employee well-being can occur through intentional and individual effort and that employees can learn effective strategies to improve their well-being (Page & Vella-Brodrick, 2013).

Balint groups. Balint Groups are a therapeutic tool developed in response to the burnout and compassion fatigue experienced by general patient doctors (Benson & Magraith, 2005). Compassion fatigue is the onset of fatigue caused by working with individuals who experienced stressful events combined with empathy for that individual (Figley, 2013). In Balint Groups, doctors meet in small groups of eight to 12 to discuss reactions in their lives triggered by their roles and interactions with patients (Balint, 1957). The groups are facilitated by a psychoanalyst (Balint, 1957). Like teachers, general practitioners often work in isolation, and Balint Groups allow practitioners to have peer support to manage their mental health (Benson & Magraith, 2005). The Balint Group structure occurs in five stages (Kantor, 2015):

- Exposition: one practitioner shares a relationship problem that they are facing with a patient or colleague.
- Questions: members of the group pose questions to the practitioner who shared.
- Fantasy: while the individual who shared is silent, other members of the group talk through the other perspectives the individual may not see or could be ignoring.
- Protagonist Statement: the sharer summarizes what they heard and shares a clear commitment to resolve their issue.

Kjeldmand and Holmstrom (2008) studied the impact of Balint Groups on the perceived job satisfaction and burnout of nine general practitioners in Sweden. The researchers contacted existing Balint Groups in southern Sweden and obtained nine volunteers willing to be

interviewed about their over two years of experience in Balint Groups (Kjeldmand & Holmstrom, 2008). Interviews were conducted in the participants' workplaces between 2002 and 2003 (Kjeldmand & Holmstrom, 2008). An interview guide of open-ended questions was used to gather information about participants' reasons for joining the group, their experience within the group, their influence in their roles, and how they would describe the group (Kjeldmand & Holmstrom, 2008). Kjeldmand and Holmstrom (2008) used an empirical phenomenological psychological method to analyze transcripts from the interviews. The researchers pulled the following themes from the interviews: competence, professional identity, sense of security, parallel processes, resilience, and satisfaction (Kjeldmand & Holmstrom, 2008). Kjeldmand and Holmstrom (2008) concluded that the parallel processes increased participants' competence, personal identity, and sense of security. This process increased a base of endurance and satisfaction, which led to the general practitioners' rediscovering joy in their work (Kjeldmand & Holmstrom, 2008). The participants all stated that participation in the Balint Groups is beneficial and essential to their work and increases their self-perceived confidence when working with challenging patients (Kjeldmand & Holmstrom, 2008). Kjeldmand and Holmstrom (2008) concluded that Balint Groups might help all general practitioners prevent burnout in their roles.

Rabinowitz, Kushnir, and Ribak (1994) studied the impact of Balint Groups on the efficacy of 13 primary care nurses. Participants took the Psychological Medical Inventory, which included the psychosocial abilities and psychosocial sensitivity at the beginning, middle, and end of the Balint Group experience, to measure changes in efficacy (Rabinowitz et al., 1994). Participants met for Balint Groups for two hours, once every two weeks. After a year of participation, the survey results showed a significant positive change in both subsets of efficacy (Rabinowitz et al., 1994). Increases in self-efficacy were also demonstrated in the mid-term

survey (Rabinowitz et al., 1994). The researchers concluded that Balint Groups had a beneficial effect on primary care nurses (Rabinowitz et al., 1994). The researchers also noted the importance of ongoing training programs for the mental health of individuals in service fields (Rabinowitz et al., 1994).

Rabin et al. (1996) focused on immigrant doctors because of the professional distress they experience in their roles. The researchers pulled 22 immigrant physicians treating drug addicts in a community program (Rabin et al., 1996). Using a questionnaire on drug treatment self-efficacy and the Psychological Medicine Inventory, the researchers intended to measure the self-efficacy of the participants' abilities to treat their patients due to participation in Balint Groups (Rabin et al., 1996). The survey was administered four times over 2.5 years (Rabin et al., 1996). Participants met for Balint Groups for two hours, once every two weeks (Rabin et al., 1996). The survey results showed significant positive changes in the self-efficacy of the doctors (Rabin et al., 1996).

Nease, Lichtenstein, Pinho-Costa, and Hoedebecke (2018) focused on using Internet-based Balint Groups in addressing clinician burnout. The traditional in-person format for Balint Groups limited practitioners' ability to engage in Balint Groups if their practicing locations did not include a trained Balint Group leader (Nease et al., 2018). Nease et al. (2018) studied an international Balint Group pilot program resulting from a collaboration between the World Organization of Family Doctors, the Young Doctors Movement, and the International Balint Federation. The study explored a virtual Balint Group with 14 participants from all over the globe, including the United States, Peru, Nigeria, India, Australia, and Switzerland. Zoom online video-conferencing platform was chosen to host the Balint Group meetings because it was more tolerant to lower Internet bandwidth than other platforms tested, including Skype. Participants

engaged in monthly online Balint Group meetings for a year, with members signing a contract agreeing not to miss consecutive meetings or more than three total meetings. The experience was evaluated using two surveys that participants completed using Survey Monkey. The first survey was given after each Balint Group meeting, and the second survey was given quarterly. The survey items were taken from the American Balint Society's Leader Evaluation Form, the Weekend Evaluation Form, and Flatten's Evaluation Form. All these surveys measure the participant's responsiveness to the Balint Group experience. The researchers concluded that Balint Groups could successfully convene online and have common outcomes with in-person meetings. Nease et al.'s (2018) findings align with research on virtual communities of practice (Dubé et al., 2005).

Recently, studies have shown positive effects of Balint Groups on educators. Bazarova and Potapov (2016) investigated the coping mechanisms used by 50 teachers in Russia who were involved in the Balint process. In this study, Balint Groups were considered a professional learning community centered on supporting the teacher's ability to cope with stress in their roles (Bazarova & Potapov, 2016). The study found a positive correlation between participation in the Balint Groups and the participants' ability to use cognitive and emotional coping strategies (Bazarova & Potapov, 2016). Teachers shared that the Balint Groups improved their confidence, professional satisfaction, and competence (Bazarova & Potapov, 2016).

Balint Groups Interaction with Proposed Practical Model

Balint Groups meets all three components of the practical framework. Balint Groups are a form of learning communities (DuFour et al., 2016), which allow members to develop the interpersonal skill of trust (Benson & Magraith, 2005) and create open learning environments (W. K. Smith, Besharov, Wessels, & Chertok, 2012). W. K. Smith et al. (2012) stated that this

skill could help leaders feel comfortable raising challenging information. Experiencing Balint Groups allows participants, with the support of their peers, to address the issues they are experiencing in their roles and collectively problem-solve to build realistic solutions (Benson & Magraith, 2005).

Through the sociocultural perspective, Balint Groups are a form of CoP (Lave, 1991), allowing practitioners in the same field of study to collaborate ongoingly to engage in collective inquiry (Bierschenk & de Sardan, 1997). As the theoretical and practical frameworks illustrate, the CoP, the Balint Group, serves as the MKO. Participants propose problems within their ZPD, and through a collective inquiry process, problem-solve with their peers (Vygotsky, 1979). The problem-solving process results in new knowledge and skills (Resnick, 1987). The process transforms the learner's beliefs and practice (Lim & Renshaw, 2001).

CoPs are an approach to collective participation, which is one of the principles of professional development used to evaluate the interventions in the intervention literature review. So, Balint Groups allow novice teachers with a shared experience (being a member of USTA) to engage in collective experiences that target their needs and challenges (Desimone & Garet, 2015). Secondly, Balint Groups allow participants to engage in professional development for a sustained duration. Participants in Balint Groups meet ongoingly during the academic year. During each meeting, group members can follow up on commitments and learning outcomes ongoingly (Kantor, 2015).

Additionally, Balint Groups will place participants in the active role of their learning. Participants come to the meeting with their own proposed problems. These problems can be a dilemma they face in their roles, interpersonal problems they are experiencing, or a new skill they are struggling to implement (M. Roberts, 2012). Collectively, the group works together in

diverse reflection activities to analyze how individuals process information (Rohlwing & Spelman, 2014). Participants use their collective experiences to engage with the problem and develop solutions (Spillane, Reiser, & Reimer, 2002).

Within the sociocultural theory, the Balint Group structure allows novice teachers to learn through social experiences in their environment (Vygotsky, 1979). Participants showed interpersonal problems experienced in their roles and helping their peers while collaborating toward a common goal (Benson & Magraith, 2005). This idea is an essential component of the sociocultural theory (Raphael et al., 2014). Additionally, the sociocultural theory supports learning during the problem-solving process that occurs with small group practice inquiry and problem-solving (Raphael et al., 2014; Resnick, 1987). In working together to solve their peers' interpersonal challenges, they can construct new knowledge; the learner develops new knowledge for themselves.

Conclusion

Among the interventions discussed, this researcher concludes that the interventions situated in the sociocultural theory and met the three components of the practical framework: sustained duration, active learning, and collective participation consistently showed the strongest impacts on self-efficacy, burnout, and retention. The interventions that addressed teacher mindsets also supported a correlation between the three constructs: self-efficacy, burnout, and retention.

Given the research on teacher retention interventions, the relationship between teacher self-efficacy and occupational stress, and effective professional development, this researcher proposes the implementation of Balint Groups with USTA participants. As stated previously, the use of Balint Groups has shown positive effects on the retention, reduction of stress, and increase

of self-efficacy in health professionals (Adams, O'Reilly, Romm, & James, 2006; Graham, Gask, Swift, & Evans, 2009; Kjeldmand & Holmstrom, 2008; Rabinowitz et al., 1994). Additionally, the Balint Group aligns with the elements of effective professional development indicated in the practical and sociocultural frameworks. The professional development intended to engage participants in Balint Groups because they represented an active professional learning experience that was collective, sustained, and allowed participants to stay active in their learning (Desimone & Garet, 2015; Learning Forward, 2011).

Chapter 4: Intervention and Methodology

The review of the literature and the results of the needs assessment revealed patterns between novice teachers' experiences with high levels of occupational stress that, over time, increase levels of burnout and attrition. Additionally, the data from the needs assessment revealed that the participating teachers who indicated lower levels of burnout and higher self-efficacy tended to have stronger self-proclaimed intentions to persist in the classroom. The findings for the needs assessments have aligned with the research literature (Brouwers & Tomic, 1999; Carrinus et al., 2012; Herman et al., 2018).

The intervention literature review revealed several approaches to increasing novice teacher retention, including changes to organizational structure (Baugh & Stone, 1982; Schelvis et al., 2017), improving teacher skills through content-specific and pedagogical training (Carr & Evans, 2006; Oakes et al., 2013; J Ross & Bruce, 2007), and providing emotional resilience supports (Gold et al., 2010; MJ Taylor, 2018). This study focused on a Balint Group model as an intervention because the approach aligns with the sociocultural theory of learning (Vygotsky, 1979) and encompasses the three critical components of strong professional development (Desimone & Garet, 2015). Both the sociocultural theory and the professional development components correlate with an increase in self-efficacy; thus, increasing retention.

Purpose of Study

This researcher investigated the relationship between participation in Balint Groups and a novice teacher's perception of self-efficacy and burnout. Additionally, the researcher examined the relationship between participating in Balint Groups and the persistence in the classroom by comparing the participants' self-proclaimed intentions to persist in the classroom before and after participating in the intervention. Due to the time constraints of the study, the researcher could not

examine retention data for the participants for their duration in the USTA program nor for the 5-year period required for teachers to be considered veteran educators (Ingersoll, 2004). Thus, the researcher examined intentions to persist based on participant responses to persistence questions. Based on the conceptual model (Figure 6), the researcher hypothesized that participants' self-efficacy would increase, and their levels of burnout would decrease due to participation in the Balint Group. Additionally, the researcher hypothesized that participants in the Balint Group would express a greater desire to persist in the classroom after the intervention. Figure 6 illustrates a conceptual model of the researcher's initial hypothesis.

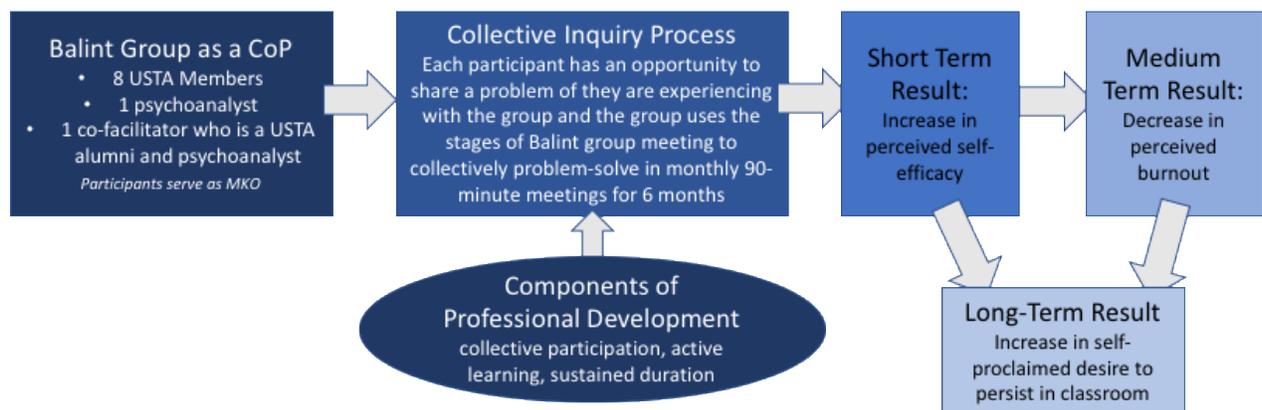


Figure 6. Conceptual model of intervention's potential influence on outcomes.

Lastly, the researcher evaluated the Balint Group process focusing on participant responsiveness to the Balint Group experience and adherence to the program's design (Dusenbury, Brannigan, Falco, & Hansen, 2003). The following research questions guided this study:

RQ1: How did participants perceive their experience engaging in a 6-month Balint Group?

RQ2: How did the study implementation adhere to or differ from the proposed implementation procedures?

RQ3: How did participation in a 6-month Balint Group experience change novice-teacher self-efficacy along the three domains: (a) efficacy in classroom management, (b) efficacy in instructional strategies, and (c) efficacy in student engagement?

RQ4: How did participation in a 6-month Balint Groups change participants' level of burnout across the three domains: emotional exhaustion, depersonalization, and low personal accomplishment?

RQ5: What was the difference in teacher self-expressed intent to persist in the classroom before and after participating in the Balint Group intervention?

Convergent Mixed-Method Research Design

The researcher chose to root this study in the pragmatic paradigm because the problem of novice teacher attrition is broad and complex and, as the literature review indicated, does not have one objective truth (Maxwell, 2006). Research rooted in the pragmatic paradigm pulls together insights from both qualitative and quantitative research, mixing these methods in a way that offers the best answers to research questions (Johnson & Onwuegbuzie, 2004). A paradigm defines reality and how a researcher can gain knowledge of that reality (Maxwell, 2006). The pragmatic research paradigm focuses on influence and probability rather than what is objectively a cause or truth (Johnson & Onwuegbuzie, 2004). Additionally, pragmatics believe that no question can be answered using a single scientific method (Johnson & Onwuegbuzie, 2004). The researcher used the pragmatic ideology to combine the findings of multiple qualitative and quantitative instruments and converge the findings to draw themes and trends.

The researcher used a convergent mixed-method research design to examine the research questions. With the convergent mixed-method approach, each research question had corresponding qualitative and quantitative dataset collected throughout the intervention, analyzed

separately, and compared for similarities and differences in the data. The combined analysis was used to draw trends and themes in response to the research questions. Using a mixed-method approach can strengthen the research's credibility and support the triangulation of the data (Creswell & Plano Clark, 2018). Moreover, a convergent design allows each dataset to inform and expand the other (Creswell & Plano Clark, 2018). Appendix G shows a summary matrix of the process and outcome evaluation research questions, the corresponding qualitative and quantitative measures, instruments, and data analysis process.

Process evaluation. Researchers must evaluate the fidelity or the ability to implement an intervention as intended (Nelson, Cordray, Hulleman, Darrow, & Sommer, 2012). Dusenbury et al. (2003) proposed five ways to measure the fidelity of intervention research: (a) adherence, (b) dose, (c) quality of delivery, (d) program differentiation, and (e) participant responsiveness. Zhang et al. (2011) added to Dusenbury et al. (2003) by including context as an additional process evaluation metric. For this study, the researcher measured adherence to the program design and participant responsiveness.

Adherence. Evaluating the adherence means that the researcher monitors the extent to which what was planned for the intervention was being executed (Zhang et al., 2011). A researcher should ongoingly check a project's implementation process (Stufflebeam, 2003). Evaluating adherence can include documenting or observing the project implementation process (Zhang et al., 2011). At the beginning of the intervention, the researcher worked in a position of power at USTA (the context of the study). Thus, observing the Balint Group meetings could have influenced participants' ability to share their honest reflections about their work (Srivastava, 2006). Instead of attending the Balint Group meetings, the researcher relied on structured field notes from a facilitator and psychoanalyst to determine if each component of the Balint Group

meeting was executed. The facilitator and psychoanalyst were provided a template to complete their field notes—the template aligned with the phases of the Balint Group meeting (see Appendix H).

Previous research on Balint Groups indicated that participants should each have an opportunity to share their issues with the group for discussion (Rabinowitz et al., 1994). Thus, the intervention design called for a different participant to present a case study to the group about an occupational stressor they are experiencing at each meeting. Because there were eight participants, for everyone to share within the 6-months of the intervention, two participants must present at each meeting with approximately 45-minutes of discussion for each participant's case study, totaling in a 90-minute meeting. Some participants could present twice. Participants cannot be required to share a case study. However, the psychoanalyst and co-facilitator encouraged each participant to share. The researcher could track which participants shared using the Balint Group Reflection Form (see Appendix I). Participants were required to complete after each meeting and asked participants if they shared a case study.

Additionally, the field notes from the Balint Group facilitator and psychoanalyst noted which participant shared and the time allocated for each portion of the Balint Group meeting structure. The reflection form includes quantitative measures that measure adherence. This measure included questions about the use of the online platform and participation.

Participant responsiveness. Dusenbury et al. (2003) define participant responsiveness as how participants viewed their participation in an intervention. Studies have measured this evaluation component in various ways, including knowledge of the intervention components, assessing participants feelings during the interventions, measuring participant's participation, and assessing participant's eagerness to promote the intervention to others (Dusenbury et al.,

2003). For this study, the researcher measured participant responsiveness using participant responses in the reflection forms (see Appendix I) collected after each Balint Group meeting and a culminating 60-minute focus group at the end of the 6-month intervention. The researcher used the reflection forms to evaluate the participants' reactions to the time spent in the Balint Groups and their level of comfortability with sharing their stories with their peers.

The researcher held a semi-structured focus group after the Balint experience to measure participant knowledge of the Balint Group structure and their willingness to promote the intervention to their peers. Participants should feel comfortable and supported during Balint Group meetings because they are asked to share vulnerable stories about their experiences with occupational stress and burnout (Rabinowitz et al., 1994). Additionally, the structure of a Balint Group meeting depends on individuals sharing their stories and being willing to provide various perspectives to others' stories (Rabinowitz et al., 1994). Moreover, the conceptual model illustrates that feeling a part of a supported community is an outcome of their intervention; thus, this is an important program evaluation component to measure. The reflection form and semi-structured focus group posed questions to participants about each of these requirements.

Outcome evaluation. The outcome evaluation design used a one-group pre- and post-test design. With this design, the participants received a pre-test followed by a treatment. After the treatment, the same test is administered as a post-test to measure intended outcomes. For the pre- and post-tests, validated measures were used to measure the change in self-efficacy and burnout, including excerpts from the Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998) and the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001). The survey also included questions about participants' intentions to persist in the classroom. The semi-structured focus groups and interviews provided a qualitative narrative around participants'

persistence intentions concerning their participation in the Balint Group experience and any change in self-efficacy and burnout.

Method

The theoretical population for this concurrent mixed-method study is USTA members. This section outlines the participants, measures, and procedures the researcher used to conduct this study.

Participants. The accessible participant population was USTA members in a southern metropolitan city. These individuals all taught at K-12 schools in public and public charter schools in five school districts throughout the city. Participants were currently enrolled in their internship year through an alternative certification program or were in their second year as the lead teacher of their classroom after completing an alternative certification program. All participants had a valid teaching certificate or probationary certificate in the state and served as full-time lead teachers. The researcher verified these criteria by using the state certification system, which provides open access to current information regarding certification status and type for all educators.

Due to the limited interest, all those who volunteered were selected for the intervention; thus, this study used convenience sampling. As a result, the sample population did not mirror the demographical breakdown of the assessable population. Participants included eight USTA members: one male and seven females. The gender breakdown in the accessible population was 75.1% female and 24.9% male (C. Chambers, personal communication, November 15, 2020). Considering the ethnic breakdown of USTA's members during 2020 to 2021 academic year, 34.6% of members self-identify as Black, 18.4% White, 24.4% LatinX or Hispanic, 11.1% Asian American and Pacific Islander, 11.5% multiethnic/multiracial, and (C. Chambers, personal

communication, November 15, 2020). The sample population consists of 28.6% of participants who self-identifies as LatinX, 28.6% White, 28.6% Black, and 14.2% AAPI. Seventy-six percent of USTA members were under 25 years of age, 15% were within the 25 to 29 range, and USTA members 30 and over made up the remaining 9% of the sample population (C. Chambers, personal communication, November 15, 2020). Of the study’s sample population, 57.1% were under 25 years of age, 28.6% were within the 25 to 29 range, and 14.3% were over 30. Lastly, in the metropolitan region, 21.2% of USTA members taught at high schools, 34.1% taught at middle schools, and the remaining 44.7% taught at elementary schools in the district (C. Chambers, personal communication, November 15, 2020). In the study’s sample, 85.7% of participants were elementary school teachers, and the remaining were middle school teachers. Table 5 provides an overview of participants’ demographic characteristics self-reported in the pre- and post- surveys.

Table 5

Demographic Information by Participant

Participants	Gender	Race/ethnicity	Age range	Years of teaching experience	School-type	Subject	Teaches state standardized-tested subject
Participant 1	Female	AAPI	< 25	2	Elementary	Science	Yes
Participant 2	Female	Black	< 25	1	Elementary	Math	Yes
Participant 3	Female	White	25-29	2	Elementary	English	No
Participant 4	Male	Black	< 25	1	Middle	English	Yes
Participant 5	Female	LatinX	25-29	2	Elementary	English	Yes
Participant 6	Female	White	30+	2	Elementary	General Education	Yes
Participant 7	Female	LatinX	< 25	2	Elementary	Math	No
Participant 8	Female	White	< 25	1	Elementary	General Education	No

The current USTA members who met this criterion during the 2020 to 2021 academic year received a recruitment email to their school email address (see Appendix J). Additionally, the researcher used current communication structures embedded in USTA’s framework to

promote the study with a short blurb (see Appendix K). These structures included bi-weekly emails sent to all USTA members and alumni. Both the recruitment email and blurbs included a recruitment survey (see Appendix L).

A psychoanalyst and co-facilitator served as participants in the study. The co-facilitator is a USTA alumnus; thus, he had previous experience in the classrooms he leveraged during the Balint Group conversations to relate to participants. The co-facilitator was a general psychiatrist in the same metropolitan city as the study's participants. He participated in Balint Groups with other general psychiatrists. He obtained a certification from the American Balint Society to lead Balint Groups before co-facilitating the Balint Groups in this study. The co-facilitator recommended an experienced Balint Group facilitator to serve as his mentor and the psychoanalyst for this study.

The American Balint Society previously trained the psychoanalyst to lead Balint Group meetings, including facilitating the Balint Groups that the co-facilitator previously engaged in as a participant. The psychoanalyst was a clinical psychologist who served as a director of behavioral science in a city outside of the study's focus area. The psychoanalyst had led Balint Groups since 1993. He formally served as the U.S. representative for the International Balint Federation and a Mentor for the Balint Group Leader Education Fellowship.

Following the recruitment of participants, all individuals who volunteered to participate in the study received a consent form (see Appendix M), which allowed the participants to consent to participate in the study and provided the researcher permission to collect and analyze from the intervention and research study. During the recruitment phase of the study, the researcher worked with incoming USTA members before their enrollment in a certification program and their roles as lead teachers in the classroom. Therefore, the researcher was not

responsible for pay, evaluations, or job retention. This process mitigated participant coercion. Likewise, online surveys and tests were collected online through Google Forms rather than given directly to the researcher to ensure that teachers were comfortable revealing true thoughts and feelings about the research experience.

Measures and instrumentation. Instrumentation included a pre- and post-test, focus groups, field notes, semi-structured debriefs, semi-structured interviews, and post-meeting reflection forms. This section reviews each of the instruments used in this mixed-method study.

Pre- and post-test. The researcher used a pre- and post-test as a quantitative measurement to assess each outcome evaluation research question. Before the first Balint Group meeting, participants received a pre-test (see Appendix N) via email (see Appendix O). In addition to the link to complete the pre-test, the participants received a four-digit identification code to complete the pre- and post-tests and reflection forms. The researcher examined changes in individual participants over time. After the 6-month experience, participants received a post-test. The post-test mirrored the pre-test received at the beginning of the experience. Measurements in the pre- and post-test included the Maslach Burnout Inventory (Horn & Schaufeli, 1998) and the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001), which both used Likert-type scale questions. Demographic and retention information was also collected using closed questions. Additionally, one open-ended question on the assessment allowed participants to elaborate on their intent to persist in the classroom.

Maslach Burnout Inventory. The first section of the pre- and post-test included the Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998). The survey consists of 22 statements that assessed burnout along three domains: (a) emotional exhaustion, (b) depersonalization, and (c) personal accomplishment. A Likert-type scale was used with a

range of responses from 1 to 6, with 1 indicating *never*, 3 indicating *now and then*, and 6 indicating *always* to identify the frequency to which the statement applies to them. Sample statements included the following: (a) I feel emotionally drained by my work, and (b) I have accomplished many worthwhile things in this job. The Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998) was used in the needs assessment.

As stated in Chapter 2, confirmatory factor analyses were performed to test the factorial validity of the survey (Horn & Schaufeli, 1998). Based on the results, the validity of the survey can be considered adequate (Horn & Schaufeli, 1998). The predictive validity and discriminant and construct validity were also found to be adequate (Horn & Schaufeli, 1998).

Teacher Self-Efficacy Scale. The second section included the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001). The scale included questions within each of the following three subfactors: (a) Efficacy in Classroom Management, (b) Efficacy in Instructional Strategies, and (c) Efficacy in Student Engagement using a Likert scale. The Likert-type scale has a range of responses from 1 to 9, with 1 indicating *nothing*, 5 indicating *some influence*, and 9 indicating a *great deal* to identify how much a teacher believes they can do in each situation. Sample questions include: (a) How much can you do to control disruptive behavior in the classroom, and (b) to what extent can you craft good questions for your students? The Teacher Self-Efficacy Scale has 12-items, and the scale's reliability is 0.90 (Tschannen-Moran & Hoy, 2001). This instrument was used in several studies discussed in the intervention review (Canrinus et al., 2012; Herman et al., 2018; Tschannen-Moran & McMaster, 2009) and has strong criterion validity (Tschannen-Moran & Hoy, 2001).

Persistence and demographic information. The third data source within the pre- and post-test included closed-ended qualitative and quantitative data regarding demographic

information and the participants' intentions to persist in the classroom. The participants were asked about their gender, race, age, years of experience, and school and subject placement using closed questions. The participants' intents to persist in their roles were assessed with closed questions, such as “Do you see yourself teaching beyond your 2-year commitment?” Participants responded to one close-ended question: “What are your long-term career plans?” They responded to open-ended question: “Looking at your answers above, what factors contributed to your decisions around persisting in the classroom?”

Assessing their long-term career plans helped evaluate participant career interests since the needs assessment indicated most participants had career interests outside of the classroom and the literature review indicated the same (Ingersoll, 2001). Additionally, the open-ended question allowed participants to provide a qualitative narrative behind their motivations for continuing their roles in the classroom or leaving. This information was examined for themes to explain what fuels the novice teachers' decision.

Reflection forms. It is important that participants feel comfortable and supported during Balint Group meetings because the meetings required participants to share vulnerable stories about their experiences with occupational stress and burnout (Rabinowitz et al., 1994). Additionally, the structure of a Balint Group meeting depends on individuals sharing their stories and being willing to listen to their peers' stories and think through the perspectives of other stakeholders in the story, such as the student, colleagues, or families (Rabinowitz et al., 1994). Thus, participants received reflection forms via email after each Balint Group meeting via email (see Appendix P). The reflection forms evaluated participant responsiveness (RQ1) to the time spent in the Balint Groups and adherence (RQ2) to the Balint Group structure. The reflection

form (see Appendix I) was derived from the individual session survey used in Nease et al. (2018) study on virtual Balint Groups.

The survey used the American Balint Society's Leader Evaluation and consisted of a 5-point Likert-type scale in response to statements. The Likert-type scale had a range of responses from 1 to 5, with 1 indicating *strongly disagree* and 5 indicating *strongly agree* to identify how much participants agree to statements about their experience in the meeting. Sample statements included the following: (a) The group had a nonjudgmental trusting climate, (b) I felt safe in making comments or presenting a case, (c) the session met my expectations, and (d) the group was able to understand the case from the standpoint of the teacher. Additionally, Nease et al. (2018) added a question about the use of the virtual platform to their session survey: "The quality of audio/video streaming did not affect my participation in the group" (p. 20). Given the virtual structure of the proposed intervention, this question was used in the reflection form. Nease et al. (2018) indicated that the form used in their study had strong validity in determining participant responsiveness to the intervention. An additional open-ended question was added to the form to address RQ1, which focused on participant responsiveness.

Focus group. A semi-structured focus group was conducted with all participants (Lochmiller & Lester, 2016). Focus groups can elicit the interpretations of multiple participants and generate a theory or patterns of thoughts (Creswell & Clark, 2018). This focus group provided more voice around the participant's experience with burnout, self-efficacy, and responsiveness to the Balint Group experience. Participants engaged in a 60-minute focus group with open-ended prompts to support elaboration and clarification of key points (Lochmiller & Lester, 2016). Appendix Q includes the semi-structured focus group questions.

Lochmiller and Lester (2016) asserted that semi-structured focus groups allow for the researcher a guide to conduct a structured exploration of the research questions while having the flexibility to be responsive to the themes that emerged during the discussion. The focus group was used to access the outcome evaluation questions (RQs 3 to 5) and participant responsiveness (RQ1). Each of the questions in the focus group was paired with a research question and a quantitative measurement to triangulate the data. This process can be seen in the summary matrix (see Appendix G). The focus group was recorded and transcribed so that the researcher could review and code thematically (Lochmiller & Lester, 2016).

Field notes. The psychoanalyst and co-facilitator kept field notes during the Balint Group meetings. These field notes were used to measure the adherence of the study (RQ2). The co-facilitator was mainly responsible for completing the field notes since the psychoanalyst was the main facilitator for the experience. The researcher provided the psychoanalyst and co-facilitator with a template that outlined the Balint Group experience and provided space for the facilitator to take notes (see Appendix H). The researcher reviewed the field notes and recorded any discrepancies between what happened during the meeting and the intended structure in a matrix to measure adherence or the degree to which the Balint Group experience was executed with fidelity.

Semi-structured debrief. The researcher collaborated with the psychoanalyst and the co-facilitator to review any discrepancies. These collaborative meetings served as a form of credibility strengthening strategy (Creswell & Miller, 2000). Creswell and Miller (2000) suggested that credible data were the result of close collaboration with participants throughout the process of research. Thus, the researcher worked closely with the Balint Group facilitators to

ensure adherence and gain a deeper understanding of the Balint Group meeting. These debriefs were recorded for record-keeping with the consent of the facilitators.

Semi-structured interviews. After analyzing the data from the pre- and post-tests, focus groups, and reflection forms, the researcher conducted semi-structured 60-minute interviews with four participants. The researcher used stratified random-sampling to select one participant from each of the following categories for the semi-structured interviews: (a) participants who did not show the change between the pre- and post-test, (b) participants who demonstrated a positive correlation between participating in the Balint Group and one of the intended outcomes, (c) and participants who demonstrated a negative correlation between participating in the Balint Group and the intended outcomes. Once divided into these categories, the researcher randomly selected one participant from each group to participate in a follow-up semi-structured interview.

These interviews served as a form of member checking. Creswell and Miller (2000) described member checking as a strong technique for establishing credibility. The researcher shared the data analysis with the participants to confirm the credibility of the interpretations and narrative account (see Creswell & Miller, 2000). Throughout the interview, the researcher asked the participants if the themes that emerged in the analysis made sense, were developed from sufficient evidence, and if the overall conclusions were accurate (see Creswell & Miller, 2000). Then, the researcher incorporated the participant's feedback into the final narrative.

Procedure. Balint Groups conducted with general practitioners and health professionals have shown success in all three constructs (burnout, retention, and self-efficacy; Kjeldmand & Holmstrom, 2008; Rabinowitz et al., 1994; Rabin et al., 1996). The researcher hypothesized that the same could be true for novice educators. This researcher examined the influence of participating in the intervention to decrease burnout, increase self-efficacy, and subsequently

increase the likelihood of retaining novice teachers enrolled in USTA. This section includes an overview of the intervention, the purpose of the study, research design, and methodology.

The Balint Group protocol is rooted in the researcher's conceptual model (Figure 6). The model is supported by research literature on self-efficacy (Bandura, 1977), the sociocultural theory (Vygotsky, 1979), and literature on effective professional development (Desimone & Garet, 2015). The researcher believed that through the Balint Group experience, participants would develop a community of practice (Lave & Wenger, 1991) and a community of support (Bazarova & Potapov, 2016) that provides them with consistent interactions with all elements of self-efficacy. Based on previous research and the needs assessment, the increase in self-efficacy should decrease the participant's experience with burnout (Brouwers & Tomic, 1999; Herman et al., 2018).

For this study, participants met monthly from December to May via Zoom to engage in a virtual Balint Group facilitated by a psychoanalyst and co-facilitator, certified by the American Balint Society to facilitate Balint Groups. During each Balint Group meeting, participants engaged in two cycles of reflections using the following five stages:

- Exposition: one practitioner shares a relationship problem that they are facing with a student, parent, or colleague.
- Questions: members of the group pose questions to the practitioner who shared.
- Fantasy: while the individual who shared is silent, other members of the group talk through the other perspectives the individual may not see or could be ignoring.
- Protagonist Statement: the sharer summarizes what they heard and shares a clear commitment to resolve their issue.

Data collection. Data were collected using the mixed method convergent design approach. This section includes data from the pre- and post-test, reflections, focus groups, semi-structured interviews, field notes, and semi-structured debriefs.

Pre- and post-test. Pre- and post-test (see Appendix N) was collected using Google Forms, a web-based tool for survey customization. Participants received the link to the test in an email. The initial email included the participants' four-digit identification code throughout the study as a unique identifier. Lastly, the email described the purpose for the test, the process to complete the test electronically. Participants received one week to complete the pre-test via Google Forms. The post-test was completed via Google Forms after the final Balint Group meeting. Participants used the same four-digit identification code to complete the post-test. Once the surveys were complete in Google Forms, the data collected from the tests was uploaded into SPSS 9.0, a quantitative data analysis tool.

Participant reflection form. After each Balint Group meeting, participants received a short reflection survey (see Appendix I). Participants received the link to the reflection survey during their meetings and used their four-digit identification code to complete the form. These reflection forms were completed using Google Form. Participants completed the reflection before leaving the Balint Group meeting. After the 6-month experience, the quantitative data from the reflections were transferred from Google Forms to SPSS 9.0. The qualitative data were transferred to a GoogleDoc so the researcher could conduct a descriptive coding process and identify emergent themes organized by construct.

Semi-structured focus groups. The semi-structured focus group was conducted using Zoom after the 6-month intervention. Participants received a calendar invite for the focus group that included the link to the Zoom meeting via email. Once they joined the focus group, the

researcher shared a confidentiality policy with participants before asking the focus group questions (see Appendix Q). The focus group audio was recorded using Zoom and transcribed using a transcription service called Otter.ai with permission from the participants. Once complete, the transcriptions were transferred to GoogleDocs for the researcher to develop a coding notebook. The audio was stored in the researcher's Google Drive to reference for thick descriptions of the study.

Field notes. The co-facilitator took field notes during each Balint Group meeting and shared his field notes (see Appendix H) with the researcher via email after each Balint Group meeting. The researcher analyzed the notes, identifying any discrepancies between what the facilitators indicated happened during the meeting in comparison to the outlined Balint Group procedures to measure adherence. The notes were stored in the researcher's secure Google Drive to provide thick descriptions of the study.

Semi-structured debriefs. Additionally, the researcher debriefed facilitators after each Balint Group meeting using Zoom online video conferencing to gain insights around the Balint Group's adherence to the intended model and assess any changes that need to take place in the subsequent meetings. These debriefs were transcribed and audio recorded using Otter.ai. Once completed, the transcriptions and audio were stored in the researcher's Google Drive to reference for thick descriptions of the study.

Semi-structured interviews. Following the data analysis, three participants were selected to participate in 60-minute semi-structured interviews (see Appendix R) as a form of member checking. These interviews were audio-recorded using Zoom and transcribed using Otter.ai. Once complete, the researcher stored the transcription and audio in Google Drive.

Table 6

Data Collection Timeline

Intervention activity	Description	Timeline, duration, and location
Pre-test	12 question short form of the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001) Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998) Retention and demographic questions	November 2020 20-minute survey in an online Google Forms
Balint Group sessions with reflection form	In-person and Virtual Balint Group meetings with 7-question reflection survey	Monthly from December 2020 to May 2021 90-minute Balint Group meetings online using Zoom 5-minute survey in online Google Form
Field notes	Notes taken during the Balint Group meetings by the co-facilitator.	Monthly from December 2020 to May 2021 90-minute Balint Group meetings online using Zoom
Semi-structured debriefs	Meetings with psychoanalyst and co-facilitator to discuss any discrepancies in the field notes regarding adherence to Balint Group structure and any changes that should be implemented	Monthly from December 2020 to May 2021 1-hour collaborative online meeting following each Balint Group meeting using Zoom
Post-test	12 question short form of the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001) Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998) Retention and demographic questions	May 2021 20-minute survey in online Google Forms
Focus group	Focus group with participants.	May 2021 1-hour virtual focus group using Zoom
Semi-structured interviews	Interviews with three selected participants that served as member checking post data analysis	June 2021 1-hour virtual meetings using Zoom

Data analysis. The researcher used a convergent mixed-method approach to data analysis. This process meant that the qualitative and quantitative data were analyzed separately. Then, the researcher analyzed each finding to identify trends.

This section outlines the researcher's approach to data analysis. Additionally, the research summary matrix (see Appendix G) illustrates the alignment between the research questions, measures, and instruments that operationalize the variable of interest for this study, data collection, and data analysis.

Quantitative data. Quantitative data from the pre- and post-test was used primarily to reflect changes in teacher beliefs in self-efficacy, burnout, and self-proclaimed persistence. Specifically, the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001), the Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998), and the retention-specific question except for the open-ended question about their future career plans, were analyzed using a descriptive statistic approach. Additionally, the researcher used descriptive statistics to examine average responses to the Likert-scaled questions on the ongoing reflection forms.

Analyzing quantitative data required the researcher first to assign numerical values to responses and establish a quantitative codebook (Creswell & Clark, 2018). Because the quantitative data in the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001), the Maslach Burnout Inventory: Dutch Educator Survey (Horn & Schaufeli, 1998), and the ongoing reflection forms are all Likert-scale questions, numeric values were already assigned to each response.

Using the appropriate software, the researcher must inspect trends in the data using descriptive analysis for each major variable (Creswell & Clark, 2018). The researcher used SPSS first to examine the mean and mode to determine the frequency and average in specific responses and seek out initial patterns in the data. The researcher used basic descriptive statistics to analyze the quantitative data in the reflection form. The researcher used SPSS to determine the mean and mode and analyze the average participant responsiveness to each Balint Group meeting.

Once completed, the researcher used SPSS to determine the distribution of responses for each group, determining the response selected most frequently and the percent of participants in each group who chose each response. Following a paired-sample 2-tailed *t* test was used to determine whether there is a difference between the pre- and post-test survey.

Given the small sample size of this research study, inferential statistics did not yield significant data as the absolute sample size to determine statistical significance is a minimum of 100 participants (Creswell & Clark, 2018). In quantitative data analysis, small sample sizes make it more likely that a researcher may experience a Type I or II error when evaluating the trying to reject the null hypothesis (Lochmiller & Lester, 2016).

Qualitative data. A qualitative approach was used to analyze data from the focus group, open-ended questions on the reflection forms, and open-ended questions on the pre- and post-test separately. The researcher analyzed the qualitative data by utilizing a jotting strategy (Miles, Huberman, & Saldana, 2014) to note thoughts throughout the initial review of the material. Then, a descriptive coding process was used to analyze the data. The researcher used descriptive coding to intensify topics (Miles et al., 2014) and identify patterns within the participant responses. Next, the researcher categorized the data, organizing the findings by construct. Finally, the researcher identified emergent themes. The researcher developed a codebook from these responses (see Appendix S).

Additionally, the researcher developed a matrix of any discrepancies noted from the field notes and corresponding debriefs in a data matrix to examine trends. This analysis was used in conjunction with quantitative data from the reflection forms to examine adherence. Once this process was complete with each of the qualitative measures, the researcher combined the findings with that of the quantitative data to determine trends and themes pertaining to the research questions.

Researcher Subjectivity

The researcher was the measuring instrument for all the qualitative data; thus, it was important to name the potential biases (Lochmiller & Lester, 2016). The researcher was an alum

of USTA and an experienced educator. Additionally, at the onset of the study, the researcher was an employee of USTA and served as each participant's coach at the onset of their teaching experience. All these factors could have influenced the data collection and analysis components of the research.

The researcher was a member of USTA from 2013 to 2015, serving as a sixth and seventh-grade English teacher at a charter school in the southern metropolitan region that serves as the context of this research. Additionally, the researcher was a part of the alternative certification program in which many of the members of USTA who participated in the study were enrolled or received their certification. Following her experience as a USTA member, the researcher persisted in her role as a middle school English teacher for an additional year prior and enrolled in an administrative role at that school site serving as a middle school English coach and appraiser, and Literacy Specialist. In 2017, the researcher transitioned to working for USTA as a full-time staff member.

At the onset of the study, the researcher served in a managerial role that oversaw programming for USTA members throughout their onboarding, summer training, and 2-year experience. Given her role, she worked with many USTA members, managed their coaches from USTA, and collaborated with administrators at their school site, certification program, and districts. The researcher's position in the organization and relationship with USTA members may have influenced participants' decision to participate in the research study. Considering it could impact the participants' engagement in the intervention, the researcher removed herself from the implementation of the intervention and implemented measures to ensure the experience still adhered to the intervention's intended structure. However, by the conclusion of the Balint Group meetings, the researcher transitioned from USTA to take a role as an academic consultant for a

national education-based nonprofit. In this role, the researcher consults school districts and state education agencies on their academic strategies. Thus, at the time of the semi-structured focus groups and interviews, the researcher was not employed by USTA. However, her former positionality and relationship with participants could have influenced participants' responses to focus group and interview questions (Srivastava, 2006).

Chapter 5: Findings and Discussion

This chapter aims to discuss the findings of a study on Balint Group interventions in the educational field. The intervention occurred from December-May of the 2020 to 2021 academic year. The intervention was intended to include six monthly virtual Balint Group meetings. However, due to a natural weather disaster in the southern metropolitan region that was the focus of the study, the Balint Group meeting scheduled for February was unable to occur. Despite this interruption, the Balint Group meetings continued in March.

Both process and outcome evaluation questions will frame the discussion of research findings, including how these findings relate to theories and prior studies. The process evaluation questions assessed participant perception and adherence to the intervention. The outcome evaluation questions assessed the potential influence of the Balint Group experience on participants' self-efficacy, burn-out, and self-express intent to persist in their roles. Additionally, this chapter discusses the strengths and limitations of the study. Finally, a conclusion outlines recommendations for future practice for teacher certification and training programs desiring to retain teachers and address occupational stress in novice teachers. The researcher collected both qualitative and quantitative data to address outcome and process evaluation questions.

Findings

This section provides an overview of the qualitative and quantitative findings organized by research questions. Informing the analysis will be data from the pre- and post-tests, reflection forms, field notes, semi-structured interviews, and focus groups. Additionally, the researcher will discuss any additions, omissions, or shifts in the original plan for the intervention. The research questions included the following:

RQ1: How did participants perceive their experience engaging in a 6-month Balint Group?

RQ2: How did the study implementation adhere to or differ from the proposed implementation procedures?

RQ3: How did participation in a 6-month Balint Group experience change novice-teacher self-efficacy along the three domains: (a) efficacy in classroom management, (b) efficacy in instructional strategies, and (c) efficacy in student engagement?

RQ4: How did participation in a 6-month Balint Groups change participants' level of burnout across the three domains: emotional exhaustion, depersonalization, and low personal accomplishment?

RQ5: What was the difference in teacher self-expressed intent to persist in the classroom before and after participating in the Balint Group intervention?

Participant perception. The first process evaluation research question (RQ1) related to participants' perceptions of their experiences engaging in the intervention. Examining participant perception to the Balint Group process was important to the research findings because participant perception provides a deep understanding of the intervention's strengths and weaknesses and allows the researcher to incorporate participant voice into the evaluation of the intervention (Mertens, 2018). Participant perception was assessed using the reflection forms collected after each Balint Group meeting and the semi-structured focus group. For participants to engage in Balint Groups, it is essential that they feel safe and that the space feels non-judgmental. Thus, the reflection form included five Likert-scale questions that addressed participants' responsiveness. Participants responded to each of the five statements using a 5-point Likert scale with 1 indicating *strongly disagree* and 5 indicating *strongly agree* to identify how much participants

agree to statements about their experience in the meetings. Table 7 illustrates the average responses by statement for each Balint Group meeting. Table 7 indicates a varied number of participants at each meeting because some participants were absent during the first, third, and fourth Balint Group Meeting. The quantitative data illustrates that over time, the participants' trust in one another increased. Each participant's perception of the climate being non-judgmental and trusting increased throughout the Balint experience. Overall, participants felt safe making comments and believed that their peers did a great job understanding the case from various standpoints.

Table 7

Participant Responsiveness to Balint Group Meeting Overtime

Statement	Option	Meeting 1 (n = 7)	Meeting 2 (n = 8)	Meeting 3 (n = 6)	Meeting 4 (n = 6)	Meeting 5 (n = 8)
The group had a nonjudgmental trusting climate.	Average	4.43	4.63	4.67	4.83	4.87
	Mode	5	5	5	5	5
I felt safe in making comments or presenting a case.	Average	4.43	4.358	4.33	4.83	4.75
	Mode	5	5	5	5	5
I felt I had an opportunity to speak when I wanted to.	Average	4.71	4.63	4.67	4.83	4.75
	Mode	5	5	5	5	5
The group was able to understand the case from the standpoint of being the teacher.	Average	4.43	4.38	4.50	4.83	4.88
	Mode	4	5	5	5	5
The group was able to understand the case from the standpoint of students and colleagues.	Average	4.29	4.25	4.50	4.83	4.75
	Mode	4	5	5	5	5

Additionally, the reflection form included one open-ended question to allow the researcher to gather qualitative data about participant responsiveness. The researcher analyzed trends in the qualitative data by each Balint Group meeting. During the first Balint Group meeting, the trend emerged: participants felt a part of a supportive community because the presented case was relatable to all participants. Yet, everyone could contribute to developing

solutions by sharing from various perspectives. Although participants shared that they enjoyed hearing those varied perspectives, they also revealed that they did not believe the group generated concrete solutions for the participant who shared to act. The trends in qualitative data from the second meeting revealed that participants continued to feel a sense of community and support. Participants shared that the group did a great job generating new perspectives from the teacher's, student's, and parent's viewpoints. Additionally, participants shared that the sharers could walk away with potential next steps and solutions to improving the interpersonal relationships discussed in their cases.

After the February Balint Group meeting was canceled, participants rejoined the intervention in March. Analysis of the open-ended question on the reflection forms from the March Balint Group meeting revealed that participants began understanding that the purpose was not to develop a solution, but to better understand how they can approach the challenging relationship they presented or understand the perspectives of others. Participants believed that the meeting helped them to center on the purpose of Balint Groups. Participant 2 noted, "The facilitators noticed we were giving suggestions on how to handle a situation, but we actually needed to understand a person's perspective instead." One comment that stood out was from Participant 1:

I am having a hard time presenting because I emotionally too connected to my situation. I want to share, but I am worried that I will come across as ranting or negative. Of course, I know that this is a safe space to share, but I want to find a way to present my case without being too emotionally attached.

The open-ended question on the fourth and fifth reflection forms revealed that participants all shared feelings of burnout. Additionally, participants appreciated hearing

everyone's reflections because it helped them realize they were not alone in their feelings. Lastly, participants shared that analyzing the various perspectives of other stakeholders helped them all reflect upon the cases from different vantage points. This process included understanding the stress and frustration that students and parents may have experienced. Overall, the qualitative data revealed a deeper understanding of the purpose of the Balint Groups and a push for the group to adhere to those expectations.

Lastly, analysis of the semi-structured focus groups revealed similar findings of the participants' perception of the Balint Group experience. Through the coding process, the researcher generated categories for the codes. The developed categories correlated with the research constructs; thus, the coded passages were organized by statements that spoke to participant perception, adherence to the structure of the intervention, self-efficacy, burnout, and persistence. Finally, the researcher identified themes that emerged in each category (Lochmiller & Lester, 2016). Appendix S contains a codebook of the themes that emerged from the focus group organized by the research constructs.

Analysis of the focus group revealed that participants felt a part of a community and that a desire to be a part of a community was a major contributing factor to their decision to participate in the intervention. Participant 6 shared the following:

One reason why I joined this study was mostly because I was really struggling with finding community, especially with several educators. And so, I was hoping that this experience would remind me that I'm not alone in my relationship with my students.

Participant 2 shared similar sentiments: "I wanted a feeling of a supportive, collaborative community ... I actually think it did what I was expecting."

Additionally, participants believed that the experience allowed them to deepen their understanding of others' perspectives. Participant 7 shared, "Figuring out what was happening on a student's perspective or family perspective helped me better understand how to navigate a situation. I really appreciated that." Participant 3, who did not present a case during the intervention, noted that she could still take the learnings from other's cases to shift her perception of the experience of their students and families:

The biggest reason [the Balint Group] was helpful is just the fact that we could look at it through different perspectives. So, even if it wasn't a case that I spoke about at one of the Balint Groups, it was something that I still was able to, you know, change my thinking and think about oh, what's the perspective of my student and what's the perspective of the family So, just looking at it from all different angles was really helpful and definitely helped me kind of have more of a clear head moving forward and dealing with that problem that came about.

The last major theme that emerged was the belief that the group was relatable. Participants shared that being in the group helped them realize they were not alone in their experience with stress and interpersonal relationships. Participant 2 shared, "I feel that each case that was presented, in some way, shape, or form, the group was able to relate to it." Overall, participants shared positive reflections about their experience with Balint Groups. When asked what they would change about the experience, participants only shared that they would have preferred to engage in the Balint Groups in-person instead of an online platform. Participant 8 noted, "The in person aspect of a meeting like this would strengthen it immensely just because then you'll become even more connected with the people you are speaking with." However, in

the focus group, each participant shared positive responses about their experience with Balint Groups and the opportunity to engage in discussion with peers.

Adherence. The second process evaluation question (RQ2) focused on adherence. Adherence means monitoring the extent to which what was planned for the intervention is being executed (Zhang et al., 2011). The researcher measured adherence using quantitative measures in the reflection forms and qualitative measures, such as field notes, semi-structured debriefs with facilitators, and focus group responses.

The reflection form included eight Likert-scaled questions. Participants responded to a series of eight statements using a 5-point Likert scale with 1 indicating *strongly disagree* and 5 indicating *strongly agree* to identify how much participants agree to statements about their experience in the meetings. Table 8 illustrates the average responses by statement for each Balint Group meeting. The first reflection form revealed that participants struggled to provide suggestions and identify areas where they could influence change in the case that the participants shared. However, in the remaining Balint Group meetings, participants strongly agreed that participants could both provide solutions to the problems their peers shared without the influence of the facilitators and that the individuals who shared could identify specific actions they would take to change the relationship-centered problems they were experiencing. Overall, the quantitative data indicates that the Balint Groups adhered to their intended structures.

Table 8

Participant Perception of Adherence overtime

Statement	Option	Meeting 1 (n = 7)	Meeting 2 (n = 8)	Meeting 3 (n = 6)	Meeting 4 (n = 6)	Meeting 5 (n = 8)
The quality of audio/video streaming did not affect my participation in the group.	Average	4.71	4.75	4.50	5	4.86
	Mode	5	5	4	5	5
The session met my expectations.	Average	4.29	4.88	4.67	5	4.86
	Mode	5	5	5	5	5
I learned to consider problems from various perspective and gained a new understanding of the problem.	Average	4.29	4.63	4.50	4.83	4.75
	Mode	4	5	5	5	5
I received new insights and ideas that will shape my own work in the future.	Average	4.12	4.75	4.83	4.83	4.75
	Mode	5	5	5	5	5
The timing of the sessions was acceptable (day of the week, time of the day, and frequency of meetings).	Average	4.29	4.75	4.17	4.67	4.38
	Mode	4	5	5	5	5
The participants worked together to provide solutions to the problem without the influence of the facilitators.	Average	3.43	4.00	4.00	4.83	4.88
	Mode	4	5	5	5	5
The individuals who shared remained silent while the group discussed interpretations and potential solutions to the problems.	Average	4.29	4.75	4.67	4.83	4.88
	Mode	4	5	5	5	5
The individuals who shared committed to a specific action they will take leaving this meeting.	Average	2.86	4.25	4.67	4.83	4.75
	Mode	2	5	5	5	5

Themes that emerged from the analysis of the focus group transcript aligned with the quantitative findings. The focus group revealed that participants initially believed the Balint Group meetings would be about receiving suggestions for action steps they could take in the classroom the next day that would change student performance; however, through the process, they realized it was about understanding the perspectives of others. For example, Participant 7 shared the following:

I initially thought this would be kind of like a problem solving group where I would present a case, and then fellow educators would help me, like figure out my next step.

But, in reality it was more of, ‘this is what I’m experiencing with a student,’ and then I

got to sit and listen to the different perspectives of the situation. It was eye opening in that we talked about like the parent perspective and the student perspective. So, although the focus wasn't on problem solving itself, it was still a really valuable experience because it reminded me. I'm not the only person involved in this relationship.

This theme provides some qualitative narrative around the increase in the quantitative responses to the question “The participants worked together to provide solutions to the problem without the influence of the facilitators.” Over time, participants' perceptions of solutions and problems shifted, and they could see the experience of understanding the perspective of others as a valuable solution to their interpersonal conflicts.

One additional theme from the focus group was a desire to discuss relationships beyond the student-teacher experience. During the focus group, participants also shared that they assumed they could only discuss teacher-student relationships because facilitators explained medical Balint Group experiences using patient-doctor relationships. Participants desired to explore other relationships in their work environment. Participant 6 shared a case about a relationship with a colleague and believed that the meeting helped her deepen her understanding of her co-workers' perspective and improved their abilities to work together in service of their students.

In addition to the focus group analysis, the researcher analyzed the qualitative data from the field notes, semi-structured debriefs, and reflection surveys. Using the field notes, transcripts of the semi-structured debriefs with facilitators, and reflection surveys, the researcher identified which sessions were adherent or deviated from the Balint Group structure. Although none of the sessions deviated from the intended structure of the Balint Group meetings, the researcher noted

that attendance and engagement were themes that influenced variation like the Balint Group meetings.

Attendance. Attendance is an indicator of adherence. Previous studies on Balint Groups indicate that it is essential for participants to consistently attend Balint Groups for a minimum of 6-months for change in the intended variables to occur (Kjeldmand & Holmstrom, 2008; Rabin et al., 1996). The Balint Group facilitators collected attendance during each Balint Group meeting. Attendance indicates that only Participants 1, 2, 5, and 7 were present at the Balint Group meetings. Participant 3 was absent from two meetings. Participants 4, 6, and 8 were each absent from one meeting.

Moreover, due to a natural disaster that impacted the southern metropolitan city, the February Balint Group meeting was canceled, which reduced the number of Balint Group meetings that occurred as a part of the intervention to five. The reduction in Balint Group meetings and lack of consistent attendance could have influenced the outcomes of the intervention. In the semi-structured debriefs, the facilitators indicated attendance or tardiness to be an issue for some participants. Balint Groups require a minimum of six participants to adhere to the Balint Group structures.

The researcher and facilitator strategized methods to improve attendance. As a result, the researcher sent reminder texts messages three days before each Balint Group meeting starting after the first Balint Group meeting. After the second Balint Group meeting, the researcher began to send reminder texts messages to all participants a week before the Balint Group meeting and again the day of each meeting. The reminders improved attendance for the remaining meetings. Lastly, in semi-structured debriefs and field notes, the facilitators shared that some participants were off-camera or engaged in other tasks during the Balint Group meetings, such as riding in

cars as passenger or engaging with individuals in their households. Lack of engagement could also influence participants' experience. Table 9 provides thick descriptions of each participant's engagement in the Balint Groups over time.

Table 9

Participant Engagement in Balint Group Meetings

Participant	Meeting 1 Dec. 13, 2020	Meeting 2 Jan. 10, 2021	Meeting 3 Mar. 7, 2021	Meeting 4 Apr. 18, 2021	Meeting 5 May 23, 2021
# of cases presented	1	2	2	2	1
Participant 1	On-time and on camera	On-time and on camera	On time and on camera	On-time and on camera; Presented a case to the group	On-time and on camera
Participant 2	On-time and on camera; Presented a case to the group	On-time and on camera	On-time and on camera; Presented a case to the group	On-time and on camera	On-time and on camera
Participant 3	On-time and on camera	Experienced technical issues causing participant to continuously log off and on	Absent	Absent	On-time and on camera
Participant 4	Tardy due to Internet issues during storm	On-time and on camera	Absent	On-time and on camera	On-time and on camera
Participant 5	Tardy due to Internet issues during storm	On-time and on camera	Tardy	On-time and on camera; Presented a case to the group	On-time and on camera
Participant 6	Absent due to storm	On-time and on camera	On time but was in the car with family on a road trip	On-time and on camera	On-time and on camera; Presented a case to the group
Participant 7	Tardy due to Internet issues during storm	On-time and on camera; Presented a case to the group	Tardy	On-time and on camera	On-time and on camera
Participant 8	Tardy due to Internet issues during storm	On-time and on camera; Presented a case to the group	On-time and on camera; Presented a case to the group	Absent	Absent

Participant engagement. Lastly, participants' experience with burnout, self-efficacy, and persistence is also influenced by whether a participant presents a case to the group (Kjeldmand &

Holmstrom, 2008). Because requiring a participant to share is against the Balint Group structure, the researcher relied on the facilitators to encourage participants to share their experiences. The reflection form required participants to indicate whether they shared a case during the Balint Group meeting to keep track of participation. Variance in participation could have influenced the participants' experience across the three constructs measured in the outcome evaluation questions. Thick descriptions of the intervention are organized by the Balint Group meeting below to provide a complete overview of its adherence to its original intents.

Balint Group Meeting 1. The first Balint Group meeting occurred on December 30, 2020. A thunderstorm happened in the metropolitan city during the call, which inhibited some participants from joining the call on time. Participant six was completely unable to attend due to the storm. During the first Balint Group meeting, the facilitators spent the first 45-minutes engaging in introductions, providing an overview of the Balint Group experience, and engaging in norming. Following, the participants engaged in their first Balint Group, in which Participant 2 presented a case. Given the variance in timeliness, the researcher began sending text reminders to all participants three days before the meeting. In the text, the researcher also reminded participants of the importance of being on time and shared that if participants are more than 10-15 minutes late, they should only observe.

Balint Group Meeting 2. The second Balint Group meeting occurred on January 10, 2021. During this meeting, facilitators spent the first 10 minutes welcoming participants. Following, they provided 35 minutes for Participant 7 to present a case, allowed participants to take a 5-minute break, 35 minutes for Participant 8 to present a case, with a 5-minute closing. The facilitators shared that the meetings felt rushed as participants only had 35 minutes to explore each case. The psychoanalyst noted that a typical Balint Group meeting allows for 45-minutes

for participants to explore a case and typically focuses on one case each meeting. However, the researcher was restricted from making changes due to the barriers around the intervention, including the participants' initial consent to 90-minute meetings. Additionally, the research required that all participants had an opportunity to share a case at least once.

Balint Group Meeting 3. The third Balint Group meeting was initially scheduled for February 7, 2021; however, four participants shared they could not attend, so the meeting was rescheduled to February 17, 2021. At the time of the rescheduled date, a natural weather disaster impeded the virtual meeting from occurring. As a result, the third Balint Group meeting occurred on March 7, 2021. At this meeting, two participants were absent, two were tardy, and two were on and off camera due to distractions. Despite the barriers, Participants 2 and 8 still could share cases with the group. In the semi-structured debrief, the facilitators shared a need to re-establish norms with the group. It was agreed that the researcher would share a follow-up communication with participants drafted by the facilitators and emphasized the importance of being engaged and attending each Balint Group meeting (see Appendix T).

Balint Group Meeting 4. The fourth Balint Group meeting occurred on April 18, 2021. Participants 3 and 8 were absent from this meeting. For the first 10 minutes of the meeting, the facilitators reiterated the importance of being on camera and engaged. The reminder was helpful as all participants who were in attendance were engaged and on camera. During this meeting, Participants 1 and 5 presented cases to the group. Each presenter had 35 minutes to explore their case. During the debrief, facilitators shared a plan for only one participant to present at the final meeting to conclude the intervention with celebrations and reflections from the group.

Balint Group Meeting 5. The final Balint Group meeting occurred on May 23, 2021. During this meeting, Participant 6 provided the final case study. Following participants had the

opportunity to give reflections and shared goodbyes. In the semi-structured debrief, the facilitators shared that participants revealed that they felt like the Balint Groups were a place for them to feel “important as people and not just teachers.” They also shared that they could learn from each other’s cases. Lastly, the facilitators shared that participants mostly shared cases about their relationships with students; however, there were a few cases where participants shared cases about their relationships with colleagues.

The thick descriptions about each meeting and the qualitative and quantitative data to measure the process evaluation questions provide comprehensive insights about the participant experience and potential extraneous variables that could influence the outcome evaluation questions. The outcome evaluation questions centered on change in participants along three constructs that were the focus of the study: (a) change in self-efficacy, (b) change in burnout, and (c) participant’s self-proclaimed intents to persist in the classroom.

Change in self-efficacy. The first outcome evaluation question (RQ3) examined change in the participants’ self-efficacy due to the intervention; the researcher used the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001) as a quantitative measure. This measure was included in the Pre- and Post-Test (see Appendix N) and measured teacher self-efficacy across the three domains. The Likert-type scale has a range of responses from 1 to 9, with 1 indicating *nothing*, 5 indicating *some influence*, and 9 indicating a *great deal* to identify how much a teacher believes they can do in each situation. Appendix F provides an overview of the questions about self-efficacy broken down by domain.

Examining the quantitative data indicated that overall, the participants’ self-efficacy slightly decreased in the class management and student engagement domains. This finding indicates that the participants' perceptions of their influence over class management and student

engagement decreased throughout the 6-month experience. Conversely, the participants' perceptions of their efficacy in instructional strategies increased, indicating that the participants believed their instructional skills improved throughout the 6-month experience. Overall, participant responses revealed high self-efficacy across all three domains.

When examining change at a participant level, the data reveals that efficacy in instructional strategies was the only domain in which all participants' self-efficacy increased or remain consistent. The other domains, "efficacy in student engagement" and "efficacy in class management," varied by participant. Participant 7 was the only participant who did not experience a decline in self-efficacy across any three domains. Table 10 illustrates the change in self-efficacy by domain for each of the participants.

After examining the descriptive statistics, the researcher used a paired sample two-tailed t test to determine if the change was significant between pre-intervention self-efficacy and post-intervention self-efficacy across all three domains. The p -value for "efficacy in class management" ($p = 0.4721$) is greater than alpha ($p = 0.05$), which means the researcher must accept the null hypothesis of the test, meaning there was not a statistically significant difference between the pre-test and post-test scores. The same was true for the remaining domains, "efficacy in student engagement" and "efficacy in instructional strategies."

Table 10

Change in Self-Efficacy by Domain

Participant	Efficacy in class management		Efficacy in student engagement		Efficacy in instructional strategies	
	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)
Participant 1	7.25	6.50	8.00	7.25	8.00	8.00
Participant 2	7.75	7.50	6.75	7.25	6.50	6.50
Participant 3	7.75	7.50	7.75	8.00	6.50	6.50
Participant 4	7.50	7.00	8.50	7.75	7.00	8.25
Participant 5	7.00	6.50	7.25	6.25	6.00	6.75
Participant 6	8.00	8.50	8.50	8.00	8.50	9.0
Participant 7	5.75	6.25	6.50	6.50	4.25	6.75
Participant 8	8.00	6.75	6.75	8.75	7.00	8.25
Average	7.38	7.06	7.50	7.47	6.72	7.50
Mode	8	8	8	8	6	7
<i>p</i> -value	0.4721		0.9561		0.1924	

The researcher also used the semi-structured focus group to provide participant-narrative about changes in their self-efficacy. The analysis of the focus group transcript elevated two areas where the experience with Balint Groups influenced the participants' self-efficacy—increase in participant's perception of their relationships with students and a clearer understanding of their locus of control. Participant 3 shared that even though they did not present a case, the intervention helped change the way they managed their classroom and their relationship with their students. Participant 3 added the following:

A lot of the students that were presented, I could relate to in bring it back to experiences that I was having in my classroom. So, other people's stories kind of helped me build a stronger relationship with those students that I was having a really hard time.

This qualitative reflection is contrary to the quantitative data, which indicates a decrease in participant efficacy in classroom management, although not a statistically significant difference. During the semi-structured interviews (see Appendix R) held with three of the participants as a form of member-checking, one participant shared that the contradictions could

be influenced by the experience with returning to in-person instruction, which took place in January of the intervention. This shift from a virtual to an in-person model required different classroom management practices that the novice-teachers could not use or practice since they began their teaching careers during the COVID-19 pandemic and virtual teaching. Thus, the pandemic had an unforeseen extraneous influence on the intervention study.

Participants shared that the experience with Balint Groups helped shift their perceptions of what was in their locus of control which contributed to a reduction in their stress. Participant 8 shared the following:

During the Balint Groups, it made me realize that I can let go of some things I'm trying to control, because in reality I don't have any control over it anyway. So, I would say it helped me, let go of, like, what my students do and don't do. You know, I can't really control their behavior. I can help them, and I can give them the skills they need to become, you know, more emotionally regulated and things like that. But at the end of the day, they are little people, and they can make their own choices.

Considering that the Likert scale questions in the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001) ask participants “How much can you do to” influence various factors, participants’ shifts in beliefs about what is in their locus of control could have influenced their responses to the quantitative questions.

Change in burnout. Research Question 4 (RQ4) examined change in participants’ experiences with burnout over the 6-month Balint Group experience. The researcher used the Maslach Burnout Inventory: The Dutch Educator Survey (Horn & Schaufeli, 1998) to measure change in novice-teacher burnout. The instrument consisted of 22 statements that assessed burnout along three domains (a) emotional exhaustion, (b) depersonalization, and (c) personal

accomplishment. A Likert-type scale was used with a range of responses from 0 to 6, with 0 indicating *never*, 3 indicating *now and then*, and 6 indicating *always* to identify the frequency to which the statement applies to them. Appendix E provides an overview of the questions on burnout on the pre- and post-test as distributed by the domain.

Examining the change in burnout, as measured using the pre- and post-test, revealed that, on average, participants' experience with burnout increased across all three domains during the 6-month experience. Participant 5 was the only participant whose experience with burnout decreased across all domains during the 6-month intervention. Several participants, including Participants 1, 2, 7, and 8, showed an increase in their experience with burnout across all three domains. Table 11 illustrates each participant's change in burnout across the three domains as indicated by their pre- and post-test responses. A paired sample two-tailed *t* test showed no statistical significance difference between the pre-test and post-test scores across the three domains of burnout.

Table 11

Change in Participant's Self-Reported Burnout by Domain

Participant	Emotional exhaustion		Depersonalization		Reduced personal accomplishment	
	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)	Pre-Test (<i>n</i> = 8)	Post-Test (<i>n</i> = 8)
Participant 1	2.88	3.00	1.33	2.17	2.14	2.57
Participant 2	2.44	3.89	1.00	2.00	2.56	2.71
Participant 3	4.00	3.44	0.83	1.00	3.00	1.57
Participant 4	1.22	3.44	1.00	0.67	1.43	1.57
Participant 5	3.67	3.67	1.67	1.17	2.71	2.71
Participant 6	2.56	2.22	0.83	0.50	2.14	2.29
Participant 7	3.67	5.11	1.67	2.00	2.43	3.14
Participant 8	5.22	5.44	0.83	1.67	2.43	2.14
Average	3.21	3.77	1.15	1.4	2.29	2.34
Mode	4	3	1	1	2	2
<i>p</i> -Value	0.1562		0.4328		0.861	

During the semi-structured focus group, participants' responses illustrated several occupational stressors outside of their relationships with peers, students, and parents that contribute to their experience with burnout. These factors include administrative pressures, systematic pressures, social perceptions of education, a desire for recognition, need for additional support, limited time restraints, and lack of work-life balance. All these factors were explored in the literature review and aligned with themes in novice teacher experience (Olson & Osborne, 1991).

Administrative and systemic pressures. Participants believed that the main cause of stress in their roles was with administration. Participant 5 shared the following:

Many of the stresses of this job, don't come from my students. They come from your administration or from expectations or a myriad of other sources. And so, while I think that presenting cases about students would be helpful for those students. The stress of administrative expectations and other aspects of the job, I don't know if that would be relieved, just by talking about my relationship with my kids.

Participant 2 added, "Overall, some of the stressors aren't necessarily relationship based, they're just, they are expectations placed on us by the district, by people we don't really know, or maybe even placed on ourselves." It may have been beneficial for participants to share cases about their relationships with the administration to deepen their understanding of their administration's perspectives; however, the participants lacked an understanding of the roles of their administrators. Participant 1 shared the following:

With like a principal or other colleagues, I'm not exactly sure. I don't have that like day-to-day relationship to know. "Oh, she could have done this differently or I could have done that differently." With a student, I feel like since I'm their teacher, and I'm there I

can see like ‘okay well maybe we wouldn't have this conflict if, you know, I did this, or he did that’ and other relationships I don't.

Participants also reflected on systemic pressures sharing that some things they believed to be outside of their locus of control were often positioned to be their responsibilities. Participants believed that additional supports for all the responsibilities required by teachers could reduce stress. Such supports included a desire for more in-house and counseling services in schools. One of the participants engaged in a semi-structured interview shared that the systemic and administrative pressures were exasperated during the COVID-19 pandemic, causing them to feel that they had to meet students’ educational needs alone.

Societal pressures and desire for recognition. Participants shared that they did not believe education and the role of teachers was valued in the United States, evident in the lack of emphasis placed on educational funding and low teacher compensations. Participant 5 shared the following:

Pay needs to go up. Like if you got paid more, I would feel more valued. Just because I put a lot more than 40 hours and everybody knows teachers do. Everybody knows teachers use their own money for their classrooms so I would, that would make me feel more valued. But I would also think that there needs to be a little more recognition from the district, from administrators, from lawmakers, from policymakers, because a lot of it is lip service. And in reality, I know that people who appreciate me or my parents and my kids, but they're not the ones who pay me and they're not the ones who evaluate me.

Participants shared beliefs that their pay did not match the number of hours and effort they invested in their work, making them feel undervalued in society.

Work-life balance. Participants share that they do not feel there is enough time to complete all the work required in their roles. Participant 7 noted that she feels she cannot use the restroom during her workday or sit down to complete the administrative task associated with her role until after returning home from her 10-hours at the school. However, participants share that the Balint Groups helped them understand the importance of taking a break and prioritizing their wellness without feeling guilty. During the COVID-19 pandemic, the balance between work and life was challenging for the participants as they struggled with working from home.

The stressors that the participants experienced in their role increased during the Balint Group experience. The global pandemic may have influenced this finding; however, a major trend in participant responses in the semi-structured focus groups and interviews was that the Balint Groups only supported their perceptions of their relationships with students and peers but did not change the other factors contributing to stress in their roles and burnout.

Change in intent to persist. The final research question measured change in the participant's self-proclaimed intent to persist. This construct was measured using three closed-ended questions on the pre- and post-tests. The questions included the following: "Do you intend to complete your 2-year commitment," "do you see yourself teaching beyond your 2-year commitment," and "do you see yourself teaching for 5+ years?" For each of these questions, participants were provided with "yes" and "no" options to indicate their responses.

For the first closed-ended question, 100% of participants indicated "yes" as their response on both the pre- and post-tests, indicating that all participants intended to complete their 2-year commitment. Of those participants in their second years at USTA during the intervention ($n = 5$), all completed their 2-year commitment in May 2021. The second closed-ended question examined the participant's intent to persist beyond their 2-year commitment. On the pre-test,

87.5% of participants indicated an interest in persisting beyond their 2-year commitment; however, on the post-test, only 75.0% of participants expressed an interest to persist beyond their 2-year experience. Participant 7 changed their initial intentions during the 6-month experience. The pre- and post-test also examined participants' intentions to persist beyond five years. On the pre-test, 37.5% of participants indicated an intention to persist beyond five years in the classroom. By the post-test, each of those participants maintained a belief that they would persist in the classroom for five or more years, indicating no changes along with this construct.

The pre- and post-test also examined participants' long-term career plans. This construct was measured using one closed-ended question which asked participants, "What are your long-term career plans?" It provided the following options: (a) lifetime teachers, (b) school administration, (c) educational roles outside of a school, and (d) careers outside of education. On the pre-test, 62.5% of participants indicated an interest in educational roles outside of the classroom. For the remaining options, school administration, a career outside of education, and lifetime teacher, 12.5% of participants chose each response. On the post-test, Participants 1, 4, and 6 changed their responses. Thus, 12.5% of participants indicated a desire to be a lifetime teacher, 12.5% indicated a desire to become a school administrator, 50% indicated an interest in educational roles outside the classroom, and 25% expressed an interest in roles outside of education. Participant 1 is the only participant who expressed an interest in being a lifetime teacher after the experience. This belief was contrary to her initial desire to explore educational roles outside of the classroom.

Conversely, participant six initially desired to be a lifetime teacher, and during the 6-month experience, her desires changed to wanting to explore roles outside of the classroom. The final participant whose response changed from the pre- to post-test was Participant 4, who

initially desired to explore educational roles outside of the classroom. By the end of the 6-month experience wanted to look at careers outside of education completely. Table 12 illustrates each participant’s intent to persist as indicated by their responses on the pre- and post-test.

Table 12

Change in Participant’s Self-Proclaimed Intent to Persist

Participant	Intent to persist past 2-year commitment		Intent to persist past 5+ years		Long-term plans	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Participant 1	Yes	Yes	Yes	Yes	Educational role outside of classroom	Lifetime teacher
Participant 2	Yes	Yes	Yes	Yes	School administration	School administration
Participant 3	Yes	Yes	No	No	Educational role outside of classroom	Educational role outside of classroom
Participant 4	No	No	No	No	Educational role outside of classroom	Career outside of education
Participant 5	Yes	Yes	No	No	Career outside of education	Career outside of education
Participant 6	Yes	Yes	Yes	Yes	Lifetime teacher	Educational role outside of classroom
Participant 7	Yes	No	No	No	Educational role outside of classroom	Educational role outside of classroom
Participant 8	Yes	Yes	No	No	Educational role outside of classroom	Educational role outside of classroom

The pre- and post-test also posed one open-ended question around intentions to persist in allowing participants to provide a narrative to their responses. Both the pre- and post-test entailed asking the following: “Looking at your answers above, what factors contributed to your reasons for decision around persisting in the classroom?” The researcher transferred the participants’ responses to GoogleDocs and used descriptive coding to identify emergent themes in participant responses. Three participants expressed desires to pursue graduate school and research children's education or policies influencing education on the pre-test. Another major

theme was a belief that upward mobility or influence on student experience existed in roles outside of the classroom. Participant 4 shared, “I feel there are other ways for me to make a sound impact on youth and the field of education through my future endeavors outside the classroom.”

On the post-test, stress emerged as a major theme. Three participants (Participants 3, 5, and 7) shared that their stress and burnout were the motivating factors for not persisting in the classroom. Other participants who desired to leave the classroom indicated a desire for upward mobility to influence the education system as a motivation for taking on educational roles outside of the classroom. However, Participant 1, who was the only participant who indicated a desire to become a lifetime teacher after the 6-month experience, shared that the Balint Group experience helped her set the boundaries for herself and prioritize her wellness so that she could persist and be her best self, before being the best teacher.

During the semi-structured focus group, participants elaborated on their future career plans. Table 13 shows some of the plans. All the participants who shared desired a role in education outside of the classroom.

Table 13

Future Career Interests

Participant	Quote from semi-structured focus group
Participant 1	“If you were to ask me that question that last year, I'd be like, I don't know what I'm doing but now I'm like, I feel a little bit more confident knowing that I love teaching, and knowing that I love being with kids and making some type of impact. I'm actually feeling more confident knowing, I could say like, I want to apply for a Master of Education. It was through processing it with the Balint Group that really helped me get to that decision.”
Participant 3	“Just my experience throughout the first year, I started thinking about what was there a different role within education that will be better for you than being inside the classroom. Where you don't experience all of this burnout and this stress that affects your health but at the same time you're working in the capacity of your long term goals, to really have an impact in this field. So, it really caused me to just self-reflect, and even reflect on just the entire structure of the American education system”
Participant 4	“I've always wanted to do policy, education and [USTA] was like my little choice of I knew what that would look like or what I could work on, and I feel like I've got lots of ideas now after teaching.”
Participant 5	“I honestly want to do something around financial literacy education, whether it's nonprofit whether it's a company, whether it's like some type of partnership I create for schools to I guess include in their curriculum something to do with financial literacy education. That's something I really want to be able to have my hands on within five years.”
Participant 7	“I did want to go abroad and teach for a year, because I did study abroad, and I worked with education nonprofit, and I was also kind of comparing that to my experience this year in education here United States and I feel that I would want to actually teach abroad to have a more thorough comparison.”
Participant 8	“I don't want to be in the classroom in five years, in five years I'd like to be in a PhD program, doing research to support bilingual students who have disabilities. Making my way into the field of academia, and then hopefully you're pursuing a career at the graduate or undergraduate level. I think that going to the Balint Groups and hearing that pretty much everyone in the group experienced the same thing. And made me realize I just don't want to do this for the rest of my life.”

Participant 1 contributed the experience with Balint Groups for her shift in the desire to persist in the classroom; however, other participants shared that hearing that other novice teachers were stressed during the Balint Group meetings supported their beliefs that teaching is an unsustainable career. The rationale participants provided why they believe the roles were unsustainable mirrored the various stressor they identified. Participant 6, who initially wanted to be a lifetime teacher, shared that her two years in the classroom have led her to believe that the role was unsustainable:

After being in the classroom for my first year, I quickly realized it's not for me forever. Like, it's not sustainable for me, just personally, because I do see a future for myself where I may have a family someday and I just couldn't imagine having a family, and having kids of my own while also taking care of like other people's kids But, you know, even in my second year I would say, I've learned a lot more I'm a lot more like structured I have a lot better planning and better time management, but it's still just something I don't think it's sustainable, at least in my life.

Participants desired roles outside of the classroom because they are still passionate about students but feel that administrative and district roles are more sustainable and provide a work-life balance. Several participants did not believe administrative and district roles required those individuals to take work home. They believed individuals in these roles were better compensated for their work.

Conclusions

The findings from the intervention related to previous research explored in the literature review and findings from the needs assessment. The researcher explored those correlations and the relationship between the findings and the theoretical framework.

Relationship to literature. The findings from the study were correlated with literature on the novice teacher experience and occupational stress in their roles. Researchers found that teachers' perception of their administrators (Ladd, 2009), compensation (Theobald, 1990), and structural implications of teaching in urban systems (Boyd et al., 2005; Hanushek et al., 2001; Ingersoll, 2001) contributed to their experience with occupational stress. The findings from the needs assessment also revealed that the sources of pressure were stressors intrinsic in their roles

and organizational structures. After engaging with the intervention, these stressors still influenced participating teachers' decisions to leave their roles in the classroom.

However, the literature also revealed that relationships were a source of pressure for educators (Cooper & Travers, 2012; Johnson, 2006; Ladd, 2009). Additionally, positive perceptions of relationships indicate low burnout, as depersonalization or negative attitudes toward students or colleagues are dimensions of burnout. The findings from the intervention revealed that the novice teachers' ability to analyze the perspectives of others strengthens their relationships with students and, in some cases, colleagues. The results also indicate that participants could build strong relationships and community amongst each other. Given that the study occurred virtually and during a global pandemic, the ability to build positive and supportive relationships was essential. Lastly, the participating novice teacher's ability to analyze situations from other's perspectives and decrease relationships as a source of pressure in their role improved throughout their participation in the intervention.

As discussed in the literature review, novice teachers face the challenge of meeting high expectations while learning their roles. The literature review discussed the interconnections between themes in the novice teacher experience (Olson & Osborne, 1991) and occupational stress (Anbazhagan & Rajan, 213). The themes in the novice teacher experience emerged throughout the intervention, specifically the novice teachers' sense of responsibility and ability to meet expectations. Novice teachers felt a sense of extensive responsibility to become competent quickly, which feels like role overload or being asked to fulfill tasks they are unequipped to manage. In the qualitative data, participants shared these feelings.

One of the major findings from the literature review and needs assessment that led to the development of the theoretical framework was that teacher self-efficacy (Rockoff, 2004) and

burnout (Fitchett et al., 2018) were the two factors that most correlated to the participant's self-proclaim intent to persist in the classroom. Based on social cognitive theory, teachers who believe they are unsuccessful will put forth less effort (Tschannen-Moran & Hoy, 2007). Moreover, a teacher's self-efficacy is positively correlated with job satisfaction (Canrinus et al., 2012; Johnson & Birkeland, 2003; T. M. Smith & Ingersoll, 2004; Stockard & Lehman, 2004) and negatively correlated with teacher stress (Brouwers & Tomic, 1999). However, Participant 1 had the opposite experience. In the pre-test, Participant 1 did not express a desire to persist in her role. During the intervention, her self-efficacy decreased, and her experience with burnout increased; however, by the post-test, Participant 1 shared a desire to be a lifetime teacher. Moreover, she contributed this decision to her participation in the intervention. This contradiction led the researcher to explore further the relationship between the findings and the theoretical framework.

Relationship to theoretical framework. The intervention centered on Vygotsky's (1979) sociocultural theory, specifically related to increasing self-efficacy. The theoretical frame also incorporated communities of practice. An essential component of a CoP is that individuals feel a part of a supportive community. The findings from the study indicate that the participants felt safe and supported by the group. Additionally, when interpreting CoPs from the sociocultural lens, the group serves as the MKO. During the semi-focused debrief, participants shared that they did not have the perspective of an experienced teacher or administrator, so it made it challenging to discuss other relationships outside of the student-teacher relationship (two roles that the participants knew well). Yet, stressful relationships with administrators emerged as a theme throughout the focus group. This finding led the researcher to explore expanding the intervention to include heterogenous groups of novice and experienced educators.

One of the main influences on self-efficacy is vicarious experiences (Bandura, 1977). Vicarious experiences are when an individual sees a peer; they closely identify with success in their performance (Bandura, 1977). Having novice teachers in CoPs with veteran teachers who had success could increase their self-efficacy through vicarious experiences. It could also improve participants' ability to see perspectives outside of the teacher-student-family dynamic. An ability to see the administrative perspective could also help teachers not to see the administration as a major source of pressure in their role.

Having heterogenous Balint Groups could present a challenge due to power hierarchies. Thus, if future researchers take this approach, they should note that CoPs that dissolve power hierarchies and rely on the power of the group using liberatory practices are stronger transformative learning spaces (Barton & Tusting, 2005; Lave & Wenger, 1991). Additionally, verbal persuasion contributes to self-efficacy (Bandura, 1977). Verbal persuasions are the teacher's messages about their performance from their peers, administrators, students, and parents (Bandura, 1977; Tschannen-Moran & Hoy, 2007). During the semi-structured focus group, participants shared that they did not feel appreciated or recognized by their administrators or veteran peers. Developing heterogenous models of the Balint Group could shift this belief.

Overall, the findings showed that participants' perceptions of the Balint Groups were strong. The experience allowed them to feel a part of a supportive community of practice and build stronger relationships with their students and colleagues. Throughout the experience, participants could reflect on the perspectives of others and identify their locus of control. Although the quantitative data revealed no significant change across the four domains of self-efficacy, qualitative findings indicated that participants felt successful at building strong relationships with students. They pulled upon successful interactions with students or mastery

experiences after they shared cases during Balint Groups. They also learned from the vicarious experiences of their peers. In the focus group, participants did not feel valued by their administration, reflecting a desire for more verbal persuasion.

Additionally, the qualitative data showed no significant change in burnout over time. The qualitative data shared common trends. Participants shared in the focus group that they were experiencing burnout during the study, largely due to external pressures. However, the participants collectively shared reflections about reducing the relationships with their students being a stressor in their roles. Participants shared that the stressors from external factors, like administration, contributed to their desire to pursue other roles in education outside of the classroom. However, one participant believed that her experience with the intervention shifted her mindsets about the sustainability of her work and motivated her to be a lifetime teacher. Overall, the qualitative and quantitative data analysis illustrated that some of the short-term results identified in the conceptual model of the intervention (Figure 6) were actualized. This analysis pushed the researcher to explore the other strengths and limitations of the study.

Discussion

Findings from this study have implications for practice and future research in teacher education. In this section, the researcher explores the study's strengths and limitations. Furthermore, the researcher explores how the findings of this study can inform professional learning for educators and areas of inquiry for further research.

Strengths and limitations. A mixed-method approach is a strong method for a researcher to explore examining research questions because it combines the strengths of both qualitative and quantitative methods. For the quantitative measures, utilizing a descriptive and comparative data analysis allowed the researcher to measure the impact of the intervention with

less bias than a completely qualitative study (Lochmiller & Lester, 2016). Despite the small dataset, the researcher could still analyze change over time across the research constructs. The researcher separately evaluated the qualitative measure, which provided the narrative and participant's voice. Once combined, the researcher examined similarities and differences and pulled themes, allowing the qualitative and quantitative data to expand upon each other.

When conducting a mixed-method study, a researcher should consider validity, reliability, confirmability, and trustworthiness. For quantitative data, validity is the degree to which inferences drawn from the data are accurate, and reliability refers to the degree to which a measurement is replicable across administrations (Lochmiller & Lester, 2016). In this study, criterion and content validity, and reliability were strengthened using previously validated surveys that have been used in research examined in the literature review; thus, the researcher is confident in the validity and reliability of these measurements. The research did present some threats, including concerns about internal validity. The small sample size and sampling method created threats to the internal validity of the study. Because the sample size was less than 100, statistical significance could not be established, limiting the researcher's ability to conduct inferential statistics or infer causation (Shadish, Cook, & Campbell, 2002). Additionally, the small sample sizes decreased the generalizability of the study (Lochmiller & Lester, 2016).

For qualitative data analysis, trustworthiness and confirmability should be examined (Guba, 1981). Trustworthiness is the degree to which qualitative research findings are thorough and verifiable (Guba, 1981). In other words, the research should show whether the findings remain true and accurate or credible and if the study's findings can be transferable to other contexts or if the method is dependable for use by other researchers (Guba, 1981).

During the data collection process, the researcher used thick descriptions to describe the experience and participant responses to establish dependability and transferability. Thick descriptions are rich descriptions of the study context, participants, and activities derived from the researcher's detailed notes and recordings. Triangulation is a strong research method to establish the credibility of qualitative data (Guba, 1981). Additionally, the researcher used semi-structured interviews (see Appendix R) post-data-analysis as a form of member checking. Member checking is the strongest method for strengthening the credibility of a study (Creswell & Miller, 2000).

Lastly, assessing each research question with a qualitative and quantitative measure ensured that the researcher could triangulate the data and gain more insight into the participant responses or experience (Henry, 2010). The researcher used data triangulation where varied data sources were collected over the 6-month time to address the researcher question. This process is outlined in the summary matrix (see Appendix G). Another limitation involves the sample population. Because a limited number of USTA participants volunteered to participate in the study, the researcher used convenience sampling. The sample population's demographic did not correlate with that of the theoretical population. This process also influences the generalizability of the findings.

A major limitation to the study concerned adherence. For starters, one of the Balint Group meetings was canceled due to weather implications, causing a reduction in meetings from 6-monthly meetings to five. This issue goes against previous research which asserts a minimum of six months (Kjeldmand & Holmstrom, 2008). Additionally, participant attendance and engagement were limitations. Only three participants were present for all five of the Balint Group experience. Two participants did not present cases.

Moreover, distractions in the home presented challenges. Lastly, facilitators shared that the 90-minute timeframe felt short and made it difficult to complete two cases. The researcher and facilitators could develop solutions to increase engagement and attendance, as illustrated in the finding.

Implications for practice and research. Relationships are a major component of strong school and classroom environments. Most school and classroom evaluative tools concern students' relationships with the adults in the school. Moreover, when evaluating workplace environments, major evaluative tools center on the relationships staff members have with peers and administration as it correlates to persistence in the workplace. The findings of this intervention point to Balint Groups as a CoP that provide opportunities for educators to build practice among strengthening their relationships with students and community with their peers. All the participants in this study shared that participation in the Balint Group experience provided them with the opportunity to feel a part of a community of peers in deep and sustained ways that they desired to continue in future school years. Participants could reflect on their relationships, be exposed to various stakeholders' perspectives, and strengthen their connections with their students, families, and peers.

Given the study's qualitative findings and the participants' perceptions, this researcher would propose the implementation of heterogenous Balint Groups across districts to improve staff culture and student-teacher relationships. The researcher noted that individuals should not be in Balint Group experiences with their managers, supervisors, or appraisers to ensure participants felt part of a safe and trusting environment. Having heterogenous Balint Groups that include administrators, novice, and veteran teachers across the metropolitan region would allow the group to benefit from varied perspectives.

Additionally, Balint Groups outside of the medical field have not been explored in detail. The researcher proposes further research on the use of Balint Groups to support educators with their experience with burnout and ability to see the sustainability in their roles. Further researchers should explore various models of the Balint Groups and increase the duration of the experience. The researcher proposes using additional qualitative measures to evaluate in future studies.

Due to the COVID-19 pandemic, this intervention could not explore the influence of the Balint Group experience in classroom management or culture change as instruction was no longer in-person. It would be beneficial to conduct classroom and school observations throughout the intervention to see if a change in culture and relationships occurred due to experience with the Balint Group structure. This additional qualitative measure would require the use of a validated culture observation tool.

Additionally, the researcher suggests a validated instrument to measure the intended outcomes of Balint Groups. When conducting the study, the only tool that existed was the one used for the reflection form. This study solely evaluated the participant's perception and adherence. Still, it did not evaluate change in practice, such as relationships, burnout, self-efficacy, or ability to see their roles as sustainable.

Finally, the study suggests future research on supports for novice teachers to feel their role requirements are sustainable. The study's findings illustrated that the participating teachers could shift their mindsets around students and their abilities to support the needs of their students; however, it did not mitigate the administrative and systemic pressures encompassing their work outside of the classroom and school day. The researcher recommends further investigation of the role USTA plays in helping novice teachers shape their views of the

sustainability of the role or whether the organization's structure and mission contribute to the belief that participants should not persist in the classroom long-term.

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Appendix A: Survey Questions from Needs Assessment

Sources of Pressure You Face in Your Job

Almost anything can be a source of pressure (to someone) at a given time, and individuals perceive potential sources of pressures differently. The person who says they are “under a tremendous amount of pressure of work at the moment” usually means that they have too much work to do. But that is only half the picture.

The items listed below are those which teachers have expressed as being potential sources of pressure in their role as a teacher. You are required to rate them in terms of the degree of pressure you perceive each may place on you in your job. Please use the scale below in your response:

1	2	3	4	5	6
Strongly disagree is a source of pressure	Disagree is a source of pressure	Slightly disagree is a source of pressure	Slightly agree is a source of pressure	Agree is a source of pressure	Strongly is a source of pressure

1. Building and maintaining relationships with students
2. Overall lack of resources
3. Relationships with students' parents
4. Over-emotional involvement with students
5. Dealing with basic behavioral problems
6. Inability to plan ahead due to constant changes
7. The need for constant decision-making in the classroom
8. The teacher appraisal system
9. The hours spent working at home
10. Being a 'good' teacher does not necessarily mean promotion
11. Administrative tasks
12. Having to produce 'assessments' of students
13. Having to attend evening parent meetings
14. Teachers can have little influence over school decisions as a whole
15. Conflict between my department and others for resources
16. Lack of participation in decision-making in the school
17. The 'hierarchical' nature of the structure of my school
18. Lack of 'social support' from fellow teachers in my school
19. Conflict between the needs of my department/class and the views of senior management
20. Lack of clarity concerning my role within the school
21. The lack of value placed on actual 'teaching' itself
22. Lack of support from the government
23. Verbal aggression from students
24. Physical aggression from students

- 25. Lack of parental ‘back-up’ on matters of discipline
- 26. Having a salary that is out of proportion to my workload

Burnout

Burnout is the reaction to stress over extended periods of time. The questions below measure your experience with burn out. For each of the statements below, rate the frequency to which that statement applies using the scale below

1	2	3	4	5	6
NEVER	SELDOM	NOW AND THEN	REGULAR	VERY OFTEN	ALWAYS
never	Few times a year or less	Few times a month or less	Few times a month	Few times a week	Every day

1. I feel emotionally drained by my work
2. I feel used up at the end of the day
3. I can easily understand how my students feel about things
4. I feel I treat some students as impersonal ‘objects’
5. I feel fatigued when I have to get up in the morning to face another day on the job
6. Working with people all day is really a strain for me
7. I deal very effectively with the problems of my students
8. I feel ‘burned out’ from my work
9. I feel I am a positive influence on other people’s lives through my work
10. I have become more callous toward people since I took this job
11. I worry this job is hardening me emotionally
12. I feel frustrated by my job
13. I feel I am working too hard in my job
14. I don’t really care what happens to some students
15. I can easily create a relaxed atmosphere with my students
16. I have accomplished worthwhile things in this job
17. I feel like I am at the end of my rope
18. In my work I deal with emotional problems calmly
19. I feel some students blame me for some of their problems
20. In my work, people bother me with personal problems that I don’t want to be bothered with
21. I try to keep away from the personal problems of my students

Coping Strategies

These items deal with ways you've been coping with the stress in your life. Different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1	2	3	4
I haven't been doing this at all	I've been doing this a little bit	I've been doing this a medium amount	I've been doing this a lot

1. I've been concentrating my efforts on doing something about the situation I'm in.
2. I've been getting emotional support from others.
3. I've been giving up trying to deal with it.
4. I've been taking action to try to make the situation better.
5. I've been getting help and advice from other people.
6. I've been trying to see it in a different light, to make it seem more positive.
7. I've been criticizing myself.
8. I've been trying to come up with a strategy about what to do.
9. I've been getting comfort and understanding from someone.
10. I've been giving up the attempt to cope.
11. I've been looking for something good in what is happening.
12. I've been trying to get advice or help from other people about what to do.
13. I've been thinking hard about what steps to take.
14. I've been blaming myself for things that happened.

Teacher Characteristics

These items deal with elements of your personality, including your resilience, self-efficacy, and personality type.

Please indicate the extent to which you agree with each of the following statements by using the following scale:

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly Agree

1. I tend to bounce back quickly after hard times
2. I have a hard time making it through stressful events
3. It does not take me long to recover from a stressful event
4. It is hard for me to snap back when something bad happens

5. I usually come through difficult time with little trouble
6. Even when I do something very carefully, I often feel that it is not quite right
7. I tend to take a long time to get over set-backs in my life
8. If I fail at work/school, I am a failure as a person
9. I tend to get behind in my work because I repeat things over and over
10. I hate being less than the best at things
11. If I do not do well all the time, people will not respect me
12. If someone does a task at work/school better than I, then I feel like I failed the whole task
13. I should be upset if I make a mistake
14. The fewer mistakes I make, the more people will like me
15. It takes me a long time to do something "right"
16. If I fail partly, it is as bad as being a complete failure
17. People will probably think less of me if I make a mistake
18. Even when I do something very carefully, I often feel that it is not quite right
19. I usually have doubts about the simple everyday things I do
20. If I do not do as well as other people, it means I am an inferior human being

Please indicate your opinion about each of the questions below using the scale below. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

1	2	3	4	5	6	7	8	9
Not at all		Very Little		Some Degree		Quite A Bit		A Great Deal

1. How much can you do to control disruptive behaviors in the classroom?
2. How much can you do to motivate students who show low interest in school work?
3. How much can you do to calm a student who is disruptive or noisy?
4. How much can you do to help you students value learning?
5. To what extent can you craft good questions for students?
6. How much can you do to get children to follow classroom rules?
7. How much can you do to get students to believe they can do well in school work?
8. How well can you establish a classroom management system with each group of students?
9. To what extent can you use a variety of assessment strategies?
10. To what extent can you provide an alternative explanation or example when students are confused?
11. How much ca you assist families in helping their children do well in school?
12. How well can you implement alternative teaching strategies in your classroom?

Retention

For each of the questions below, please select the information that best describes your current about your future plans.

Do you intend to complete your two-year commitment in Houston?

- Yes, I intend to complete my two-year commitment with [REDACTED]
- Yes, I intend to complete my two-year commitment with [REDACTED] in a different region
- No, I do not intend to complete my two-year commitment with [REDACTED]

Do you see yourself teaching beyond your 2-year commitment?

- Yes
- No

Do you see yourself teaching for 5+ years?

- Yes
- No

What are your long-term goals?

- Lifetime Teacher
- School Administration
- Educational roles outside of a school
- Careers outside of education

Demographic Information

For each of the questions below, please select the information that best describes you

Gender: Male

- Female
- Other

Race/Ethnicity: African American/Black (Non Hispanic)

- Asian American of Pacific Islander (Non Hawaiian)
- LatinX or Hispanic
- Multiethnic/Multiracial
- White, Caucasian (Non Hispanic)

Age: <25

- 25-29
- 30+

I teach at a/an: Elementary School

- Middle School
- High School

I teach: Special Education

- Bilingual
- General Education/Inclusion
- Social Studies
- Math
- English
- Science

Other (electives, foreign language, etc.)

Do you teach a state-tested course?

Yes

No

Appendix B: Needs Assessment Recruitment Email

Hey <Name>,

I hope everything is going well with you this school year. I am reaching out in regards to something outside of my role as a [REDACTED] employee. I am currently working towards obtaining my Doctorate in Education from Johns Hopkins University. The focus of my dissertation is exploring the impact of stress on the retention of novice teacher. I am focusing on current [REDACTED] for the study.

I would appreciate if you could take **20 minutes** of your time to complete an anonymous survey that will tell me more about your experience with stress this year. Your participation in my study is completely optional and will help me to gain a deeper understanding of the causes of stress and how we can work towards making teaching a more sustainable career.

Again, the survey is anonymous and should only take 20 minutes of your time. If you have any questions, feel free to email me at [REDACTED].

Thank you,

TaQuana Williams

Appendix C: Needs Assessment Consent Form

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Informed Consent Form

Title: Doctor of Education Needs Assessment for Research Methods and Systematic Inquiry I Course and Dissertation Research

Principal Investigator: Dr. Camille Bryant, Associate Professor, JHU, SOE

Date: 3.27.19

PURPOSE OF RESEARCH STUDY:

The purpose of this research study is to examine an educational problem within an educational context to determine the salient factors contributing to this problem. The ultimate use of the data gathered will or may become part of a student researchers' dissertation research study.

PROCEDURES:

The student researcher will ask adult participants to complete educational surveys (15-20 minutes) and participate in focus groups (45 minutes to 1 hour) to examine an educational problem within an educational context. The student researcher will also collect pre-existing de-identified student educational data.

RISKS/DISCOMFORTS:

The risks associated with participation in this study are no greater than those encountered in daily life.

BENEFITS:

The research projects will help the student researcher to better understand the salient factors that are contributing to a problem within their educational organizations. The knowledge will help to develop informed interventions that will address these contributing factors.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please email TaQuana Williams at twill168@jh.edu, Dr. Camille Bryant, at cbryant16@jhu.edu or Dr. Stephen Pape at Stephen.paper@jhu.edu explicitly stating your intention.

If you learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:

There are circumstances for which the researcher may decide to end your participation before completing the study. If you are no longer a member of the organization, your participation within the study will be terminated.

CONFIDENTIALITY

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Surveys collected in electronic format will be stored on a password protected computer. All paper documents will be kept in a locked file that is only accessible to the student researcher. Finally, all files will be erased and paper documents shredded seven years after collection.

COMPENSATION

You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by contacting TaQuana Williams at [REDACTED], Dr. Camille Bryant, at [REDACTED] or Dr. Stephen Pape at Stephen.pape@jhu.edu. If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

GIVING OF CONSENT

By proceeding to the survey, you are consenting to be a participant in this research study. Participating in the survey means that you understand the information in this consent form. Your participation is voluntary, and you can stop at any time. By completing this survey, you have not waived any legal rights you otherwise would have as a participant in the research study.

Appendix D: “Source of Pressure You Face in Your Job” Subscale

Question items	Subscale
1. Building and maintaining relationships with students	Relationships
3. Relationships with students’ parents	
4. Over-emotional involvement with students	
18. Lack of ‘social support’ from fellow teachers in my school	
23. Verbal aggression from students	Stressor intrinsic to the role
24. Physical aggression from students	
25. Lack of parental ‘back-up’ on matters of discipline	
2. Overall lack of resources	
5. Dealing with basic behavioral problems	
6. Inability to plan ahead due to constant changes	
7. The need for constant decision-making in the classroom	
9. The hours spent working at home	
11. Administrative Tasks	
12. Having to produce ‘assessments’ of students	
13. Having to attend evening parent meetings	Teacher’s role within the organization
26. Having a salary that is out of proportion to my workload	
15. Conflict between my department and others for resources	
19. Conflict between the needs of my department/class and the views of senior management	
20. Lack of clarity concerning my role within the school	
21. The lack of value placed on actual ‘teaching’ itself	Organizational structure
8. The teacher appraisal system	
10. Being a ‘good’ teacher does not necessarily mean promotion	
14. Teachers can have little influence over school decisions as a whole	
16. Lack of participation in decision-making in the school	
17. The ‘hierarchical’ nature of the structure of my school	
22. Lack of support from the government	

Appendix E: Dimensions of Burnout as Assessed by the Maslach Burnout Inventory

Question item	Subscale
1. I feel emotionally drained by my work (BLUE)	Emotional exhaustion
2. I feel used up at the end of the day	
5. I feel fatigued when I have to get up in the morning to face another day on the job	
6. Working with people all day is really a strain for me	
8. I feel 'burned out' from my work	
11. I worry this job is hardening me emotionally	
12. I feel frustrated by my job	Depersonalization
17. I feel like I am at the end of my rope	
3. I can easily understand how my students feel about things (GREEN)	
4. I feel I treat some students as impersonal 'objects'	
9. I feel I am a positive influence on other people's lives through my work	
10. I have become more callous toward people since I took this job	
14. I don't really care what happens to some students	Reduced personal accomplishment
20. In my work, people bother me with personal problems that I don't want to be bothered with	
7. I deal very effectively with the problems of my students (ORAN)	
13. I feel I am working too hard in my job	
15. I can easily create a relaxed atmosphere with my students	
16. I have accomplished worthwhile things in this job	
18. In my work I deal with emotional problems calmly	
19. I feel some students blame me for some of their problems	
21. I try to keep away from the personal problems of my students	

Appendix F: Teacher Characteristics Subscales

Question item	Subscale
I tend to bounce back quickly after hard times (R)	Resilience
I have a hard time making it through stressful events (R)	
It does not take me long to recover from a stressful event (R)	
It is hard for me to snap back when something bad happens (R)	
I usually come through difficult time with little trouble (R)	
I tend to take a long time to get over set-backs in my life (R)	Concern over mistakes
If I fail at work/school, I am a failure as a person	
I hate being less than the best at things	
If I do not do well all the time, people will not respect me	
If someone does a task at work/school better than I, then I feel like I failed the whole task	
I should be upset if I make a mistake	
The fewer mistakes I make, the more people will like me	
If I fail partly, it is as bad as being a complete failure	
People will probably think less of me if I make a mistake	
If I do not do as well as other people, it means I am an inferior human being	
Even when I do something very carefully, I often feel that it is not quite right	Doubts about actions
I tend to get behind in my work because I repeat things over and over	
It takes me a long time to do something "right"	
Even when I do something very carefully, I often feel that it is not quite right	
I usually have doubts about the simple everyday things I do	Efficacy for classroom management
How much can you do to control disruptive behaviors in the classroom?	
How much can you do to calm a student who is disruptive or noisy?	
How much can you do to get children to follow classroom rules?	
How well can you establish a classroom management system with each group of students?	
How much can you do to motivate students who show low interest in school work?	Efficacy for student engagement
How much can you do to help you students value learning?	
How much can you do to get students to believe they can do well in school work?	
How much can you assist families in helping their children do well in school?	Efficacy for instructional strategies
To what extent can you craft good questions for students?	
To what extent can you use a variety of assessment strategies?	
To what extent can you provide an alternative explanation or example when students are confused?	
How well can you implement alternative teaching strategies in your classroom?	

Appendix G: Data Collection Matrix

Research Question	Constructs	Qualitative Measure	Quantitative Measure	Data Collection	Data Analysis
Process Evaluation					
RQ1: How do participants perceive their experience engaging in a 6-month Balint Group?	Participant Responsiveness	Open-Ended Question on Reflection Form: How did you feel about the group's ability to provide the best solution for the problems proposed during the meeting? Focus group questions #1-6	Reflection Form Questions #1-5	Qualitative Data: Conducted and recorded via Zoom and transcribed using Otter.ai. Quantitative Data: Collected in Google Forms	Qualitative Data: Analyzed in Google Docs using Descriptive Coding Quantitative Data: Analyzed in SPSS 9.0 using descriptive statistics to determine mean and mode for each question overtime
RQ2: How has the study implementation adhered to or differed from the proposed implementation procedures?	Adherence to Balint Group structure	Field Notes Semi Structured Debriefs with facilitators	Reflection Form Questions #6-13	Field notes completed by facilitators and submitted to researcher via email. Semi-structured debriefs conducted and recorded via Zoom and transcribed using Otter.ai Quantitative Data: Collected in Google Forms	Qualitative Data: analyzed in Google Docs. Use jot method to note discrepancies between intended Balint Group structure and what is indicated in field notes and meeting transcripts. Use emergent coding to identify themes. Quantitative Data: Analyzed in SPSS 9.0 using descriptive statistics to determine mean and mode for each question overtime

Research Question	Constructs	Qualitative Measure	Quantitative Measure	Data Collection	Data Analysis
Process Evaluation					
RQ 3: How does participation in a 6-month Balint Group experience change novice-teacher self-efficacy along the three domains: (a) Efficacy in Classroom Management, (b) Efficacy in Instructional Strategies, and (c) Efficacy in Student Engagement?	Teacher self-efficacy	Focus Group Questions #7a-7d	Pre- and Post-Test: Teachers' Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001)	Qualitative Data: Conducted and recorded via Zoom and transcribed using Otter.ai Quantitative Data: C Collected using online Google Form	Qualitative Data: Analyzed in GoogleDocs using jotting and descriptive coding to identify emergent themes Quantitative Data: Analyzed in SPSS 9.0 with Descriptive statistics (mean and mode) and paired-sample 2-tailed <i>t</i> -test for comparing pre- and post-test results
RQ 4: How does participation in a 6-month Balint Groups change participants' level of burnout across the three domains: emotional exhaustion, depersonalization, and low personal accomplishment?	Burnout	Focus Group Questions #8-11	Pre- and Post-Test: Maslach Burnout Inventory: The Dutch Educator Survey (Horn & Schaufeli, 1998)	Qualitative Data: Conducted and recorded via Zoom and transcribed using Otter.ai Quantitative Data: Collected using online Google Form	Qualitative Data: Analyzed in GoogleDocs using jotting and descriptive coding to identify emergent themes Quantitative Data: Analyzed in SPSS 9.0 with Descriptive statistics (mean and mode) and paired-sample 2-tailed <i>t</i> -test for comparing pre- and post-test results
RQ 5: What is the difference in teacher self-expressed intent to persist in the classroom before and after participating in the Balint Group intervention?	Intent to persist	Focus Group Questions #12-14 Pre- and Post-Test Open-Ended Question: Looking at your answers above, what factors contributed to your reasons for decision around persisting in the classroom?	Pre- and Post-Test close ended questions: (1) "Do you intend to complete your two-year commitment in Houston?" (2) Do you see yourself teaching beyond your 2-year commitment?	Focus Group: Conducted and recorded via Zoom and transcribed using Otter.ai Pre- and Post-Test: Collected using online Google Form	Qualitative Data: Analyzed in GoogleDocs using jotting and descriptive coding to identify emergent themes Quantitative Data: Analyzed in SPSS 9.0 with Descriptive statistics (mean and mode) paired-sample 2-tailed <i>t</i> -

Research Question	Constructs	Qualitative Measure	Quantitative Measure	Data Collection	Data Analysis
Process Evaluation					
			(3) Do you see yourself teaching for 5+ years? (4) What are your long-term career plans?		test for comparing pre- and post-test results

Appendix H: Field Notes Template

Balint Group Meeting Notes for _____ (date)

Facilitator/Psychoanalyst Name: _____

Cycle One (40 minutes)		
Presenting Teacher:		
Exposition	Time Started: Time Ended:	Did the presenter share a relationship issue with a student, parent, or colleague?
Question	Time Started: Time: Ended	Did the group ask appropriate questions of the presenter?
Fantasy	Time Started: Time: Ended	Did the group address perspectives of both the teacher and student/parent/colleague?
Protagonist Statement	Time Started: Time Ended:	Did the presenter reintegrate into the group when brought back in?

Cycle Two (40 minutes)		
Presenting Teacher:		
Exposition	Time Started: Time Ended:	Did the presenter share a relationship issue with a student, parent, or colleague?
Question	Time Started: Time: Ended	Did the group ask appropriate questions of the presenter?
Fantasy	Time Started: Time: Ended	Did the group address perspectives of both the teacher and student/parent/colleague?
Protagonist Statement	Time Started: Time Ended:	Did the presenter reintegrate into the group when brought back in?

Appendix I: Balint Group Meeting Reflection Form

Balint Group Reflection Form

Please complete this reflection form at the conclusion of this month's Balint group meeting to provide feedback on your experience.

Principal Investigator: Dr. Yolanda Abel, Associate Professor, JHU, SOE

PURPOSE OF RESEARCH STUDY:

This study will investigate the relationship between participation in Balint groups and a novice teacher's perception of self-efficacy and burnout. Additionally, the study will examine the relationship between participating in Balint groups and the persistence in the classroom by comparing the participants' self-proclaimed intentions to persist in the classroom before and after participating in the intervention. The researcher also wishes to evaluate the Balint group process focusing on participant responsiveness to the Balint group experience and adherence to the design of the program.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please email TaQuana Williams at twill168@jh.edu or Dr. Yolanda Abel, at yabel@jhu.edu explicitly stating your intention.

If you learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Surveys collected in electronic format will be stored on a password protected computer. All paper documents will be kept in a locked file that is only accessible to the student researcher. Finally, all files will be erased and paper documents shredded seven years after collection.

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by contacting TaQuana Williams at twill168@jh.edu or Dr. Yolanda Abel at yabel@jhu.edu.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

GIVING CONSENT:

By proceeding to the survey, you are consenting to be in this research study. Your participation is voluntary and you can stop at any time. By completing this survey, you have not waived any legal rights you otherwise would have as a participant in the research study.

[Next](#)

Balint Group Reflection Form

* Required

Reflection

Date *

MM DD YYYY

/ /

4-Digit Identification Code: *

Your answer

Did you present a problem during today's meeting?: *

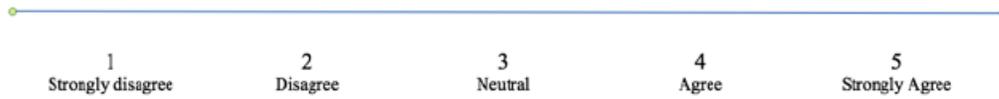
Yes

No

How did you feel about the group's ability to provide the best solution for the problems proposed during the meeting? *

Your answer

Directions: Please indicate your level of agreement or disagreement with the following statements about our most recent Balint group meeting using the scale below.



The group had a nonjudgmental trusting climate *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

I felt safe in making comments or presenting a case *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

I felt I had an opportunity to speak when I wanted to *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The group was able to understand the case from the standpoint of being the teacher *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The group was able to understand the case from the standpoint of students and colleagues *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The quality of audio/video streaming did not affect my participation in the group *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The session met my expectations *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

I learned to consider problems from various perspective and gained a new understanding of the problem *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

I received new insights and ideas that will shape my own work in the future *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The timing of the sessions was acceptable (day of the week, time of the day, and frequency of meetings.) *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The participants worked together to provide solutions to the problem without the influence of the facilitators. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The individuals who shared remained silent while the group discussed interpretations and potential solutions to the problems. *

1 2 3 4 5

Strongly Disagree Strongly Agree

The individuals who shared committed to a specific action they will take leaving this meeting. *

1 2 3 4 5

Strongly Disagree Strongly Agree

Any additional comments or feedback about today's Balint group meeting?

Your answer

[Back](#)

Submit

Appendix J: Recruitment Email

Approved October 30, 2020 Protocol Number: HIRB00011848

REQUEST FOR YOUR PARTICIPATION IN GRADUATE STUDY

BALINT GROUPS AND THEIR IMPACT ON DECREASING BURNOUT

Hi <Insert Name>,

I hope your 2020-2021 school year is starting off strong. As a former teacher I know how stressful your role in the classroom can be. So much so, outside of my work at [REDACTED], I am currently working towards obtaining my Doctorate in Education from Johns Hopkins University. My study focuses on the retention of novice teachers in education and I have specifically chosen to focus on current [REDACTED]. Throughout my research, I discovered a method used for decades to increase retention of general practitioners and mitigate their experience with burnout and stress called Balint Groups. **Balint Groups** are essentially case discussions where participants present a current issue in their work that is causing them distress, uncertainty, or thought with the hope of receiving divergent views of the problem. They have been known to reduce primary care physician burnout and may work well with teachers, since they face similar dilemmas in the workplace. Further information about Balint groups, including research studies on its effectiveness, [can be found here](#).

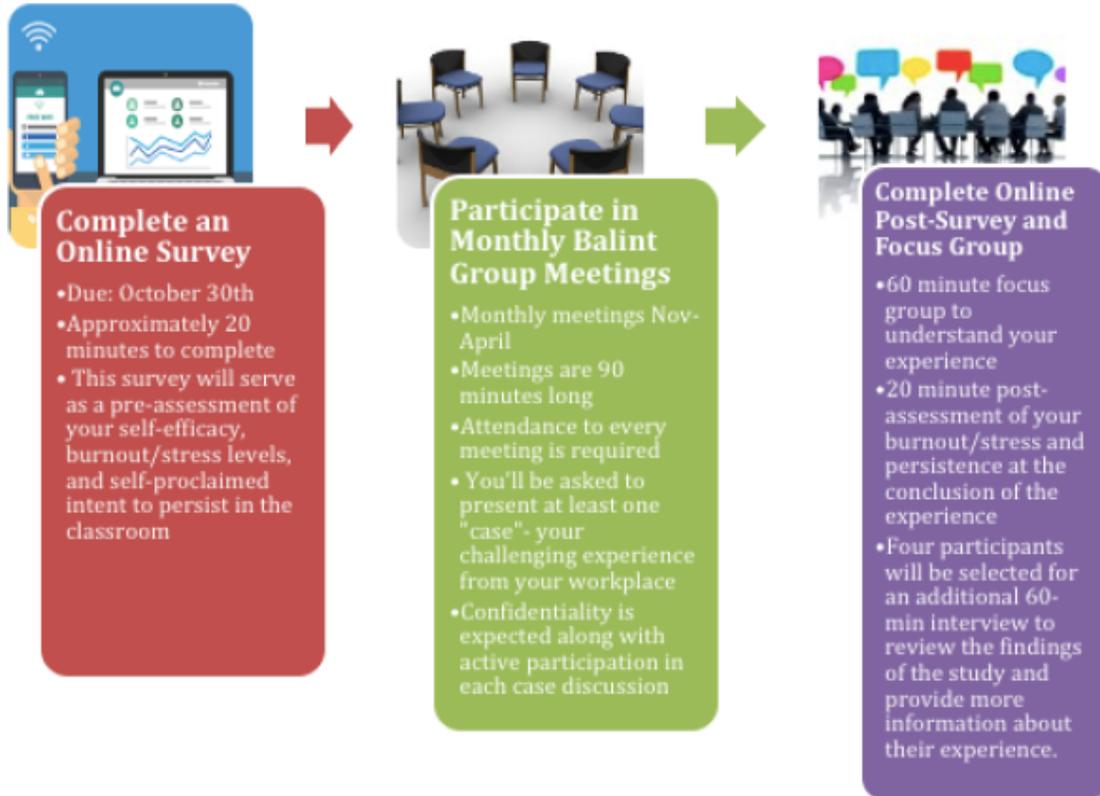
Currently, I want to study the impact Balint Groups can have on your experience with burnout and intent to persist in the classroom. These groups are intended to promote teachers' well-being. Meetings will consist of corps members discussing the emotional impact of working with challenging people and issues in their work, followed by a discussion in which other group members provide insights, support, and relate their own experiences. **I am reaching out to gauge your interest in participating in my study and engaging in a monthly Virtual Balint Group with other current corps members.** Our group will be moderated by a [REDACTED] representative (either an alum or staff member) familiar with the day to day of teaching and the educational system as well as a psychoanalyst or psychiatry resident.

What are the potential benefits of participating?

- reviving or enhancing your ability to empathize with people with whom you may find it difficult to relate
- improved insight into one's emotions, reactions, and coping skills both at work and outside of it
- a supportive environment to debrief about how challenges faced at work intersect with other facets of one's life

- an opportunity to enhance the sense of interconnectedness and community one experiences

What is the time commitment for those who agree to participate?



How do I sign up?

If you are interested in participating, please complete [this short 5 minute survey](#) and look out for emails from twill168@jh.edu for next steps. If you have further question, please do not hesitate to reach out to TaQuana Williams via email at twill168@jh.edu or phone at 757.582.██████

Thank you,

TaQuana Williams

Appendix K: Recruitment Blurbs

Recruitment Blurb for [REDACTED] Bi-Weekly Blast

Participate in Balint Group Experience

TaQuana Williams is conducting a research study as a part of her Doctorate in Education program at Johns Hopkins. Throughout her research, she discovered a method used for decades to increase retention of general practitioners and mitigate their experience with burnout and stress called Balint Groups. **Balint Groups** are essentially case discussions where participants present a current issue in their work that is causing them distress, uncertainty, or thought with the hope of receiving divergent views of the problem. Further information about Balint groups, including research studies on its effectiveness, [can be found here](#).

TaQuana will be studying the impact of Balint Groups on self-efficacy, burnout, and intent to persist in the classroom. Our group will be moderated by an alumni who has taught for 5 or more years and is continuing in the classroom and a psychoanalyst who is also an alumni. Participation in the Balint group will require committing to monthly 90-minute meetings via Zoom from November-April, completion of a 20-minute pre- and post-test, and participation in a 60-minute focus group via Zoom.

If you are interested in participating, please complete [this short 5 minute survey](#) and look out for emails from [REDACTED] for next steps. If you have further question, please do not hesitate to reach out to TaQuana Williams via email at [REDACTED] or phone at [REDACTED]

Co-Facilitator Recruitment Blurb for Alumni Bi-Weekly Email

Participate in Balint Group Experience

TaQuana Williams is conducting a research study as a part of her Doctorate in Education program at Johns Hopkins. Throughout her research, she discovered a method used for decades to increase retention of general practitioners and mitigate their experience with burnout and stress called Balint Groups. **Balint Groups** are essentially case discussions where participants present a current issue in their work that is causing them distress, uncertainty, or thought with the hope of receiving divergent views of the problem. Further information about Balint groups, including research studies on its effectiveness, [can be found here](#).

TaQuana will be studying the impact of Balint Groups on self-efficacy, burnout, and intent to persist in the classroom. The groups will be moderated by a psychoanalyst who is also an alumni; however, requires a co-facilitator. TaQuana is seeking the support of an alumni teacher with 5 or more years of experience in the classrooms and plans to persist in the classroom for the next academic year. Participation in the Balint group will require committing to monthly 90-minute meetings via Zoom from November-April, completion of field notes, and 60-minute semi-structured monthly interviews with TaQuana to debrief the previous meeting.

If you are interested in participating, please email TaQuana at [REDACTED]. If you have further question, please do not hesitate to reach out to TaQuana Williams via email at [REDACTED] or phone at [REDACTED]

Appendix L: Recruitment Survey

Balint Group Participation

Approved October 30, 2020 Protocol Number: HIRB00011848

Balint Group Participation

As a part of her dissertation study, TaQuana Williams is looking to start a monthly small group intended to promote teachers' well-being. Sessions will consist of teachers discussing the emotional impact of working with a challenging person, followed by a discussion in which other group members provide insights, support, and relate their own experiences. This model, called a Balint group, has been used with doctors for a few decades. It is associated with reduced primary care physician burnout and may work well with teachers, since they face parallel dilemmas.

She is looking for current [REDACTED] who can commit to attending monthly 150-minute Balint Group meetings from Nov-April to share and help their group of 10-12 corps members process potential stressors they are experiencing in the workplace. If you are interested in participating, please answer the questions below. Once complete, you will receive more information from TaQuana Williams via email at twill168@jhu.edu. If you have further questions, please do not hesitate to reach out.

* Required

Full Name *

Your answer

[REDACTED]

2019

2020

School District *

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

Other:

Certification Program *

- [Redacted]
- [Redacted]

Other:

Current Grade Level and Subject Area *

Your answer

If Saturday mornings are not tenable, please suggest a better day of the week and time outside of school hours (two and a half hours not including travel time).

*

Your answer

Are there any major scheduling conflicts you see over the course of the between November 2020 and April 2021 (vacations, leave, etc.)? If so, please list. You can exclude major school holidays/vacations. *

Your answer

Submit

Appendix M: Informed Consent Form

Date: 9.16.2020
Principal Investigator: Dr. Yolanda Abel
Application No.: HIRB00011848

Approved October 30, 2020 Protocol Number: HIRB00011848

**JOHNS HOPKINS UNIVERSITY
HOMEWOOD INSTITUTIONAL REVIEW BOARD (HIRB)
RESEARCH PARTICIPANT INFORMED CONSENT FORM**

Study Title: Retention of Novice Teachers enrolled in a US Teacher Development Program

Application No.: HIRB00011848

Principal Investigator: Yolanda Abel
Professor at Johns Hopkins University
yabel@jhu.edu
(410) 624- [REDACTED]

You are being asked to join a research study. Participation in this study is voluntary. Even if you decide to join now, you can change your mind later.

1. Research Summary (Key Information):

The information in this section is intended to be an introduction to the study only. Complete details of the study are listed in the sections below. If you are considering participation in the study, the entire document should be discussed with you before you make your final decision. You can ask questions about the study now and at any time in the future.

This study is a part of a research study for an Education Doctoral candidate at Johns Hopkins University. The student researcher intends to focus on the retention of novice teachers in education. Research indicates a method used for decades to increase retention of general practitioners and mitigate their experience with burnout and stress called Balint Groups. Balint Groups are essentially case discussions where participants present a current issue in their work that is causing them distress, uncertainty, or thought with the hope of receiving divergent views of the problem. They have been known to reduce primary care physician burnout and may work well with teachers, since they face similar dilemmas in the workplace.

This research is being done to investigate the relationship between participation in Balint groups and a novice teacher's perception of self-efficacy and burnout. Additionally, the study will examine the relationship between participating in Balint groups and the persistence in the classroom by comparing the participants' self-proclaimed intentions to persist in the classroom before and after participating in the intervention. The researcher also wishes to evaluate the Balint group process focusing on participant responsiveness to the Balint group experience and adherence to the design of the program.

2. Why is this research being done?

Nationally, there is a shortage in quality educators and this shortage is greater in urban communities. When teachers transfer to new districts, they tend to leave schools in low-income communities for more affluent environments, causing low-income communities to replenish their teaching staff continuously. Thus, the effects of teacher attrition disproportionately affect low-income communities of color because inexperienced teachers are most often placed in urban and rural schools, making teacher attrition a problem of not only quality but equity.

Additionally, 51 percent of the public-school teachers who left their roles in the 2012-2013 school year cited the unmanageability of their role as the primary factor, particularly naming stress as a primary factor. In the medical field, Balint groups have shown much success at decreasing the experience of burnout in general practitioners and increasing retention. This study is attempting to add to the literature on teacher retention by exploring the influence of Balint groups with teachers to see if they will result in similar outcomes in the field of education as they do in the medical field.

[REDACTED] region may join this study. Participants must teach at K-12 schools in public and public charter schools in [REDACTED] and be currently enrolled in their internship year through an alternative certification program or are in their second year as the lead teacher of their classroom after completing an alternative certification program. All participants must have a valid teaching certificate or probationary certificate in the state and serve as full-time lead teachers. Verification of the criteria will be met by using the state certification system

Additionally, the study will consist of two [REDACTED] who will serve as the facilitators of the Balint group meetings. One of the facilitators must be a licensed psychoanalyst in Houston and the other must be a teacher with five or more years of experience in the classroom. Both facilitator will complete a Balint group training to learn to facilitate these experiences.

We anticipate that about 14 people will take part in this study, 2 alumni, and 12 current [REDACTED]

3. What will happen if you join this study?

If you agree to be in this study, we will ask you to do the following things:

- Complete a 20-minute pre-test that explores your current intentions to persist in the classroom, your self-efficacy, and your experience with occupational stress. The pre-test will be administered using Google Forms.
- Monthly Balint group meetings from November 2020-April 2020. Meetings will last 90 minutes and occur using the Zoom video-conferencing platform. During each meeting, participants will engage in a problem-solving protocol to aid one of their fellow participants in analyzing a problem they are experiencing in their workplace from multiple perspectives. This protocol will take place in five stages:
 - Exposition: one participant shares a problem that they are facing with a student or colleague
 - Questions: members of the group pose questions to the participant who shared
 - Fantasy: while the individual who shared is silent, other members of the group talk through the other perspectives the individual may not see or could be ignoring
 - Practical Suggestions: the group shares suggestions for next steps
 - Protagonist Statement: the sharer summarizes what they heard and shares a clear commitment they will make to resolve their issue.

- Participants will complete a 10-minute survey at the conclusion of each Balint Group meeting via Google Forms. This survey will explore participant's reflection on the meeting experience.
- During each Balint group meeting, facilitators will take detailed notes of the experience and attend a 1-hour debrief at the conclusion of each meeting with the student investigator to review the meeting outcomes.
- At the conclusion of the 6 months, participants will receive a post-test that mirrors that of the pre-test they took at the beginning of the study.
- Following the completion of the post-test, all participants will participate in a one-hour focus group for the researcher to gain a deeper understanding of the participant experience in the Balint group process and its potential influence on their participants' self-efficacy, burnout, and retention.
- <Optional> After analyzing all of the available data, a select group of the participants will engage in semi-structured interviews with the researcher in order to provide feedback on the analysis of the data.

Photographs/Video recordings:

As part of this research, we are requesting your permission to create and use video recordings and audio recordings. Any video recordings and audio recordings will not be used for advertising or non-study related purposes.

You should know that:

- You may request that the video recordings and audio recordings be stopped at any time.
- If you agree to allow the video recordings and audio recordings and then change your mind, you may ask us to destroy that imaging/recording. If the imaging/recording has had all identifiers removed, we may not be able to do this.
- We will only use these video recordings and audio recordings for the purposes of this research.
- The audio recording will be transcribed by an outside company that has agreed to keep all data confidential.

Will research test results be shared with you?

This study involves research tests that we do not expect will be useful for your clinical care. We will not share these results with you.

How long will you be in the study?

You will be in this study for six months.

4. What are the risks or discomforts of the study?

The only anticipated risks are the frustration that can accompany sharing difficult challenges participants are facing in their workplace. You may get tired or bored when we are asking you questions or you are completing questionnaires. You do not have to answer any question you do not want to answer. There is the risk that information about you may become known to people outside this study. The risks associated with participation in this study are no greater than those encountered in daily life [or during the performance of routine physical or psychological examinations or tests].

5. Are there benefits to being in the study?

You may or may not benefit from being in this study. Some potential benefits include:

- reviving or enhancing your ability to empathize with people with whom you may find it difficult to relate

- improved insight into one's emotions, reactions, and coping skills both at work and outside of it
- a supportive environment to debrief about how challenges faced at work intersect with other facets of one's life
- an opportunity to enhance the sense of interconnectedness and community one experiences

This study may benefit society if the results lead to a better understanding of the novice teacher experience and/or a deeper understanding of occupational stress for educators.

6. What are your options if you do not want to be in the study?

Your participation in this study is entirely voluntary. You choose whether to participate. An alternative will be to not participate in this study. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

7. Will it cost you anything to be in this study?

No.

8. Will you be paid if you join this study?

No.

9. Can you leave the study early?

You can agree to be in the study now and change your mind later, without any penalty or loss of benefits. If you wish to stop, please tell us right away. If you want to withdraw from the study, please email the principal investigator, Dr. Yolanda Abel, at yabel@jhu.edu.

10. Why might we take you out of the study early?

You may be taken out of the study if:

- Staying in the study would be harmful.
- You fail to follow instructions.
- The study is cancelled.
- There may be other reasons to take you out of the study that we do not know at this time.

If you are taken out of the study early, Johns Hopkins may use or give out your information that it has already collected if the information is needed for this study or any follow-up activities.

11. How will the confidentiality of your biospecimens and/or data be protected?

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All data will be maintained separately from any identifying information by assigning each participant a number upon agreeing to participate in the study. Any link between the participants name and their data will be maintained via this number in a secure file, and will only be maintained until the data have been adequately recorded. The study visits will occur virtually, allowing the participant to participate from where they are most comfortable. Additionally, focus groups and interviews will be recorded and

transcribed and stored in a secure file.

12. What other things should you know about this research study?

What is the Institutional Review Board (IRB) and how does it protect you?

This study has been reviewed by an Institutional Review Board (IRB), a group of people that reviews human research studies. The IRB can help you if you have questions about your rights as a research participant or if you have other questions, concerns or complaints about this research study. You may contact the IRB at 410-516-6580 or hirb@jhu.edu.

What should you do if you have questions about the study?

Call the principal investigator, Yolanda Abel at 410-624-██████. If you wish, you may contact the principal investigator by letter. The address is on page one of this consent form. If you cannot reach the principal investigator or wish to talk to someone else, call the IRB office at 410-516-5680.

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling the student investigator, TaQuana Williams at 757.582. ████████

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

13. What does your signature on this consent form mean?

Your signature on this form means that: You understand the information given to you in this form, you accept the provisions in the form, and you agree to join the study. You will not give up any legal rights by signing this consent form.

WE WILL GIVE YOU A COPY OF THIS SIGNED AND DATED CONSENT FORM

Signature of Participant (Print Name) Date/Time

Signature of Person Obtaining Consent (Print Name) Date/Time

NOTE: A COPY OF THE SIGNED, DATED CONSENT FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR; A COPY MUST BE GIVEN TO THE PARTICIPANT.

Appendix N: Pre- and Post-Test

Evaluation of Novice Teacher Experience

Principal Investigator: Dr. Yolanda Abel, Associate Professor, JHU, SOE

Date: 9.8.2020

PURPOSE OF RESEARCH STUDY:

This study will investigate the relationship between participation in Balint groups and a novice teacher's perception of self-efficacy and burnout. Additionally, the study will examine the relationship between participating in Balint groups and the persistence in the classroom by comparing the participants' self-proclaimed intentions to persist in the classroom before and after participating in the intervention. The researcher also wishes to evaluate the Balint group process focusing on participant responsiveness to the Balint group experience and adherence to the design of the program.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please email TaQuana Williams at twill168@jh.edu or Dr. Yolanda Abel, at yabel@jhu.edu explicitly stating your intention.

If you learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Surveys collected in electronic format will be stored on a password protected computer. All paper documents will be kept in a locked file that is only accessible to the student researcher. Finally, all files will be erased and paper documents shredded seven years after collection.

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by contacting TaQuana Williams at twill168@jh.edu or Dr. Yolanda Abel at yabel@jh.edu.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

GIVING CONSENT

By proceeding to the survey, you are consenting to be in this research study. Your participation is voluntary and you can stop at any time. By completing this survey, you have not waived any legal rights you otherwise would have as a participant in the research study.

[Next](#)

Page 1 of 5

Evaluation of Novice Teacher Experience

* Required

Demographic Information

For each of the questions below, please select the information that best describes you.

Four Digit Identification Number *

Your answer

Gender *

- Female
- Male
- Other

Race/Ethnicity *

- African American/Black (Non Hispanic)
- Asian American of Pacific Islander (Non Hawaiian)
- LatinX or Hispanic
- Multiethnic/Multiracial
- White, Caucasian (Non Hispanic)
- Other

Age *

- < 25 years old
- 25-29 years old
- 30 + years old



- 2020
- 2019

Years of Teaching Experience *

- Less than one year
- One year
- 2+ years

I teach at a/an: *

- Elementary School
- Middle School
- High School

I teach (choose the option that is most applicable): *

- Special Education
- Bilingual
- General Education/Inclusion
- Social Studies
- Math
- English
- Science
- Other (Electives, Foreign Language, etc.)

Do you teach a [REDACTED]-tested course? *

- Yes
- No

[Back](#)

[Next](#)

Page 2 of 5

Evaluation of Novice Teacher Experience

* Required

Retention

For each of the questions below, please select the information that best describes your current about your future plans.

Do you intend to complete your two-year commitment with Teach for America? *

- No, I do not intend to complete my two-year commitment with TFA
- Yes, I intend to complete my two-year commitment with TFA in Houston
- Yes, I intend to complete my two-year commitment with TFA in a different region

Do you see yourself teaching beyond your 2-year commitment? *

- No
- Yes

Do you see yourself teaching for 5 or more years? *

- No
- Yes

Currently, what are your long-term plans? *

- Lifetime teacher
- School Administration
- Educational roles outside of a school
- Careers outside of education

Looking at your answers above, what factors contributed to your decisions around persisting in the classroom? *

Your answer

[Back](#)

[Next](#)

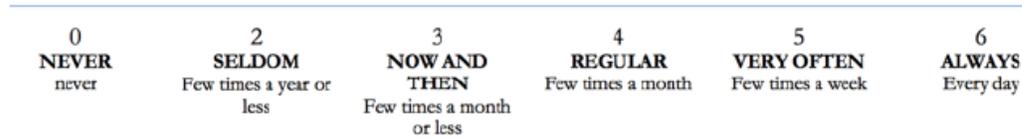
Page 3 of 5

Evaluation of Novice Teacher Experience

* Required

Burnout

Burnout is the reaction to stress over extended periods of time. The questions below measure your experience with burn out. For each of the statements below, rate the frequency to which that statement applies using the scale below



I feel emotionally drained by my work *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel used up at the end of the day *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel fatigued when I have to get up in the morning to face another day on the job. *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I can easily understand how my students feel about things *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel I treat some students as impersonal 'objects' *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

Working with people all day is really a strain for me *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I deal very effectively with the problems of my students *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel 'burned out' from my work *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel I'm a positive influence on other people's lives through my work *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I have become more callous toward people since I took this job *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I worry that this job is hardening me emotionally *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel frustrated by my job *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel I'm working too hard in my job *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I don't really care what happens to some students *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I can easily create a relaxed atmosphere with my students *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel exhilarated after working with my students. *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I have accomplished many worthwhile things in this job *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel like I'm at the end of my rope *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

In my work I deal with emotional problems calmly *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I feel some students blame me for some of their problems *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

In my work, people bother me with personal problems that I don't want to be bothered with *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

I try to keep away from the personal problems of my students *

	0	1	2	3	4	5	6	
Never	<input type="radio"/>	Always/Everyday						

[Back](#)

[Next](#)

Page 4 of 5

Evaluation of Novice Teacher Experience

* Required

Self-Efficacy

This questionnaire, adopted from the Teacher Self-Efficacy Scale (never is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities.

Please indicate your opinion about each of the following questions using the scale below. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

1	2	3	4	5	6	7	8	9
Not at all		Very Little		Some Degree		Quite A Bit		A Great Deal

How much can you do to control disruptive behaviors in the classroom? *

	1	2	3	4	5	6	7	8	9	
Not at all	<input type="radio"/>	A Great Deal								

How much can you do to motivate students who show low interest in school work? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How much can you do to calm a student who is disruptive or noisy? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How much can you do to help you students value learning? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

To what extent can you craft good questions for students? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How much can you do to get children to follow classroom rules? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How much can you do to get students to believe they can do well in school work? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How well can you establish a classroom management system with each group of students? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

To what extent can you use a variety of assessment strategies? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

To what extent can you provide an alternative explanation or example when students are confused? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How much can you assist families in helping their children do well in school? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

How well can you implement alternative teaching strategies in your classroom? *

1 2 3 4 5 6 7 8 9

Not at all A Great Deal

[Back](#)

Submit

Page 5 of 5

Appendix O: Participant Email

Subject Line: Balint Group Participation

Hey <Name>,

Thanks so much for signing up to participate in my doctoral study on occupational burnout and stress in novice educators. As a reminder, my study explores the use of Balint Groups, a method used for decades to increase the retention of general practitioners and mitigate their experience with burnout and stress. **Balint Groups** are essentially case discussions where participants present a current issue in their work that is causing them distress, uncertainty, or thought with the hope of receiving divergent views of the problem. They have been known to reduce primary care physician burnout and may work well with teachers since they face similar dilemmas in the workplace. Further information about Balint Groups, including research studies on its effectiveness, [can be found here](#).

What are you committing to?

By signing up to participate in this study, you are agreeing to:

1. **Completing an online pre-survey** [approximately 20 minutes] that will serve as a pre-assessment of your self-efficacy, burnout/stress levels, and intentions to persist in the classroom.
2. **Participating in monthly virtual Balint Group Meetings** [90 minutes per meeting]. These meetings are held using the Zoom platform. Attendance to meetings is required. You will be asked to present a case study during a minimum of one meeting. Your case study is a challenging interpersonal experience you are encountering in your workplace. Confidentiality and active participation is expected in each discussion.
3. **Completing an online reflection form after each monthly Balint Group Meeting** [approximately 10 minutes]. These surveys help gauge your perspective of the virtual Balint Group meeting and must be completed within 24 hours of the Balint Group Meeting.
4. **Completing an online post-survey** [approximately 20 minutes] that will be an exact replica of the pre-survey. This survey will be used to measure change in your experience with burnout, stress, and persistence.
5. **Participating in a Focus Group** [Approximately 60 minutes] that will occur online using the Zoom platform. This focus group will help me to understand your experience with the Balint Group.

What are the dates?

The virtual Balint Group meetings will occur on the following dates and times using the Zoom platform:

- Sunday, December 13th from 3-4:30 CST
- Sunday, January 10th from 3-4:30 CST
- Sunday, February 7th from 3-4:30 CST
- Sunday, March 7th from 3-4:30 CST
- Sunday, April 18th from 3-4:30 CST
- Sunday, May 23rd from 3-4:30 CST

The 1-hour focus group is scheduled to occur via Zoom on Sunday, May 30th from 3-4:00 CST

What are the next steps?

If you are still willing to participate in the study, you must sign a consent form and complete the pre survey. **Both the consent form and pre-survey should be completed by December 6th:**

- **<1 minute> Consent Form-** You should receive a consent form via DocuSign following this email. Please sign the form using DocuSign. If you do not receive an email or do not feel comfortable using DocuSign, please let me know and I will email you a PDF copy of the consent form.
- **<20 minutes> Pre-Survey-** Please complete [this pre-survey](#) assessing your current burnout and occupational stress levels. The survey begins with a replica of the consent form to ensure you understand the requirements of participating. Following, you will be asked for your four digit code. **Your code is <Code>.**

Link to Pre-Survey: https://docs.google.com/forms/d/e/1FAIpQLSckdd73XET7-tOmQC8XivJ8fVFQV_z_XflqXJy657QjaP76Pw/viewform?usp=sf_link

Following your completion of the consent form, you will receive calendar invites for all of the meeting times. Again, I appreciate your participation. If you have any other questions, please email me [REDACTED] and I will be sure to respond.

Thank you,
TaQuana Williams

Appendix P: Reflection Form Reminder Email

Hi!

Thank you so much for attending today's Balint Group meeting! Please take 5 minutes to provide some feedback about your experience in this meeting by <date>. If you have any questions or concerns, please reach out to TaQuana Williams via email at twill168@jh.edu or phone at 757.582. [REDACTED]

Here is the link to the reflection survey: https://docs.google.com/forms/d/e/1FAIpQLSdWF0tL-1RljC7JX0gEm7GEo-9CnijMw44EXTHkBRqV-30zjA/viewform?usp=sf_link

Note: For this survey, you will need the unique four digit code. **Your code is: <Code>**

As a reminder, the next Balint Group Meeting will take place on <date>

Thanks again for your participation,
TaQuana

Appendix Q: Semi-Structured Focus Group Questions by Construct

Participant Responsiveness:

1. Why did you decided to participate in the Balint Group study?
2. Think back to when you first heard about the Balint Groups, what were your initial first impressions?
3. What did you like most about the Balint Group experience? Why?
4. What did you dislike about the Balint Group experience? What could have made it stronger?
5. Would it have been helpful for you to continue participating in Balint Groups for a full-year?

Self-Efficacy:

6. In what ways has participation in the Balint Groups influenced your perception of your work?
 - a. How are your practices in the classroom different because of your participation in the Balint Groups?
 - b. How has participation in the Balint Group meetings influence how you feel about your ability to effectively manage your classroom?
 - c. How have the Balint Group meetings influenced your approach to engaging students in your classroom?
 - d. Has participation in the Balint Groups shifted what you believed to be in your locus of control?
 - e. Did participation shift what you thought of yourself as an educator or how you thought of yourself as an educator?

Burnout

7. Since the start of the Balint Group process, have you experience stress at work? Describe the incident.
 - a. Did you participation in the Balint Group change how you perceived or responded to the stress? Explain.
8. How has participation in the Balint Groups influenced your relationships with your colleagues?

Intent to Persist

9. Thinking about your career, what do you see yourself doing in five-years?
 - a. Is that different than what you thought you would be doing at the beginning of the school year? In what way?
10. Do you believe that teaching is a sustainable lifetime career? Why or why not?
 - a. What factors do you think would contribute to making teaching feel more sustainable?
11. How has participation in the Balint Groups, or any other professional development you may have attended, influenced your perception of teaching long-term?

Other Questions

12. Is there anything we should have talked about, but didn't?

Appendix R: Semi-Structured Interview

1. You had a chance to review the data collected from the study. Do you have any initial thoughts?
2. Looking at your pre- and post-test results, do you believe the data are accurate? What contributed to this change?
3. Are there additional factors I did not explore that you believe are worth noting?

Appendix S: Focus Group Codebook

Participant Perception		
Descriptive Code	Emergent Theme	Examples
Community	Participants felt a part of a community. A desire to be a part of a community was also a primary motivator for participants to participate in the intervention.	<p><i>“One reason why I joined this study was mostly because I was really struggling with finding community, especially with several educators. And so, I was hoping that this experience would remind me that I'm not alone in my relationship with my students.”</i></p> <p><i>“I wanted a feeling of a supportive, collaborative community...I actually think it did what I was expecting.”</i></p>
Various Perspectives	Participants were able to deepen their understanding of other’s perspectives	<p><i>“I really enjoyed just honestly diving into insight from a teacher's perspective, the students perspective, the parents perspective.”</i></p> <p><i>“The biggest reason [the Balint Group] was helpful is just the fact that we were able to look at it through different perspectives. So, even if it wasn't a case that I spoke about at one of the Balint Groups, it was something that I still was able to, you know, change my thinking and think about oh, what's the perspective of my student and what's the perspective of the family....So just looking at it from all different angles was really helpful and definitely helped me kind of have more of a clear head moving forward and dealing with that problem that came about.”</i></p> <p><i>“Figuring out what was happening on a student's perspective or family perspective helped me better understand how to navigate a situation. I really appreciated that.”</i></p>
Relatable	Participants believed that the case studies that were shared were relatable.	<i>“I feel that each case that was presented, in some way shape or form, the group was able to relate to it.”</i>
Online Platform	Participants would have preferred for the Balint Groups	<i>“I will say that, and I think this is just, you know, a problem of the current</i>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
	to occur in-person rather than a virtual platform	<i>times, I really disliked it online, and not in person. I think that the in person aspect of a meeting like this would strengthen it immensely just because then you'll become even more connected with the people you are speaking with. So, I think that, you know, virtual lack of connection was something I really struggled with, and I struggled to maintain like a strong connection to this to the group."</i>

Adherence		
Descriptive Code	Emergent Theme	Examples
Experience vs. Expectations	Participants believed that the Balint Group experience was different than what participants initially expected because it centered on understanding other perspective over problem-solving and solutions	<p><i>"I initially thought this would be kind of like a problem solving group where I would present a case, and then fellow educators would help me, like figure out my next step. But, in reality it was more of, 'this is what I'm experiencing with a student,' and then I got to sit and listen to the different perspectives of the situation. It was eye opening in that we talked about like the parent perspective and the student perspective. So, although the focus wasn't on problem solving itself, it was still a really valuable experience because it reminded me. I'm not the only person involved in this relationship."</i></p> <p><i>"I thought it was going to be solution space, but I think that's what I liked the most about it. Being able to just listen in and not just hear all of these solutions, because you can go to a lot of people for solutions and that's not really me. Sometimes I get overwhelmed with solutions or it's just too much. And I think that the fact that we were just discussing how other people feel and your perspective. That's what I enjoyed the most and say I think I also enjoyed most just the open discussion, and the display of experiences."</i></p>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
Desire to Focus on other Relationships	Facilitators explained medical Balint Group experiences using examples of patient-doctor relationships; thus, participants assumed they could only discuss teacher-student relationships and desired to explore other relationships in their work environment.	<p><i>“I think what it was for me was that I didn't realize I could present on other relationships. The facilitators had emphasized that relationship to the student would be more akin to like a doctor patient relationship. So, sense that teacher student relationship was more like the doctor patient relationship. That's why I thought I couldn't present on other relationships.”</i></p> <p><i>“One of the biggest stressors of my job is my relationship to my principal, who is also my coach and my evaluator. So, there's a lot of stress coming from that relationship, and the expectations placed on us as mentees. So, I think that that could have been super helpful”</i></p> <p><i>“With like a principal or other colleagues, I'm not exactly sure. I don't have that like day to day relationship to know. ‘Oh, she could have done this differently or I could have done that differently.’ With a student, I feel like since I'm their teacher and I'm there I can see like ‘okay well maybe we wouldn't have this conflict if, you know, I did this or he did that’ and other relationships I don't.”</i></p>
Self-Efficacy		
Descriptive Code	Emergent Theme	Examples
Student Relationships	Participants believed the intervention improved relationships with students.	<p><i>“I would say that the biggest thing that changed was the relationship with the student that I presented a case on. Before I presented the case I had a really negative relationship with them. We were always butting heads and things like that. Then, once I listened to the Balint Group talk from the student perspective and the parent perspective, it has shifted my mindset about what I could do as the educator, and how I can</i></p>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
		<p><i>change my own mindset in relation to the students.”</i></p> <p><i>“I think I've changed the way that I manage my class and the relationships that I have with the students even though I didn't present. A lot of the students that were presented, I could relate to in bring it back to experiences that I was having in my classroom. So, other people's stories kind of helped me build a stronger relationship with those students that I was having a really hard time.”</i></p>
Locus of Control	Participants believed the intervention helped the to identify what was in their locus of control.	<p><i>“It's unfortunate, but I think that my experience within the Balint Group definitely highlighted my awareness around, you know, there's quite a few things that we have control over. So, what I tried to do throughout the school year, you know, I was really focused more on what I could control, to try to alleviate some of that stress.”</i></p> <p><i>“During the Balint Groups, it made me realize that I can let go of some things I'm trying to control, because in reality I don't have any control over it anyway. So, I would say it helped me, let go of, like, what my students do and don't do. You know, I can't really control their behavior. I can help them, and I can give them the skills they need to become, you know, more emotionally regulated and things like that. But at the end of the day, they are little people and they can make their own choices.”</i></p>
Burnout		
Descriptive Code	Emergent Theme	Examples
Administrative Pressure	Participants believe that the expectations of administrators influence their experience with stress in their roles	<i>“Many of the stresses of this job, don't come from my students. They come from your administration or from expectations or a myriad of other</i>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
		<p><i>sources. And so, while I think that presenting cases about students would be helpful for those students. The stress of administrative expectations and other aspects of the job, I don't know if that would be relieved, just by talking about my relationship with my kids."</i></p> <p><i>"A lot of the stress, I feel actually came more from like administration, like factors that were outside of student concerns."</i></p> <p><i>"Overall some of the stressors aren't necessarily relationship based, they're just, they are expectations placed on us by the district, by people we don't really know, or maybe even placed on ourselves"</i></p>
Systemic Pressures	Participants shared factors intrinsic to the educational system that contributes to stress.	<p><i>"Some of the things that I thought were definitely outside of our control, some times it felt as if the school leadership or district would make it seem as if it was within a teacher's control. And so that's why I was kind of also experiencing like some conflict because in my head I'm thinking this is outside my control but it's being displayed as if it's something I can control....and that's just extra burden extra stress. It's like hey let's look at it from the standpoint of this is a collaborative effort from the federal government, the state government to policy makers to the researchers to scholars, educators, parents, students. It's not fair to put all of that on solely the educators"</i></p> <p><i>"I'm going to be doing [standardized testing] next year, and I'm still in a school where high achievement and in high stress will be prevalent."</i></p>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
Societal Perception	Participants believe education is not valued in the United States and their role as a teacher influences how other perceive them.	<p><i>“As an educator, you have to keep on this mask 24-seven, you have to, like, your title as a teacher and no matter where you are in the world they expect you to be acting in a certain way, have a certain level of professionalism, like, you know, and it just, that's not for me.”</i></p> <p><i>“I just think that America doesn't really, as a culture, as a country, value education.... It shows when you attend a public school. I just think the country can do better with the emphasis and importance they place on education.</i></p>
Desire for Recognition	Participants desire recognition	<p><i>“the amount of work we have to do. And the set amount of pay we get, you know, it's just it doesn't add up.”</i></p> <p><i>“Pay needs to go up. Like if you got paid more, I would feel more valued. Just because I put a lot more than 40 hours and everybody knows teachers do. Everybody knows teachers use their own money for their classrooms so I would, that would make me feel more valued. But I would also think that there needs to be a little more recognition from district from administrators from lawmakers from policymakers, because a lot of it is lip service. And in reality, I know that people who appreciate me or my parents and my kids, but they're not the ones who pay me and they're not the ones who evaluate me”</i></p>
Additional Supports	Participants believe teachers are required to fulfill competing duties and increasing counseling support in schools could reduce stress for teachers	<p><i>“I think a new additional in-house support will be good to have in schools”</i></p> <p><i>“taking away the hats that we have to wear, like, having more counselors, having more activities that they could do that they're in, like it just different people in the schools that are also, you know, lifting some of the weight that we have to carry it.”</i></p>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
Time Management	Participants feel there is not enough time to complete their work	<p><i>"We feel like we can't just leave work at work."</i></p> <p><i>"...going home and then I have three to four hours of work in order to keep on top of the office parts of my job."</i></p> <p><i>"Even just the fact, it's like, being able to go to the bathroom whenever you want. Or being in an office sitting down and working on the task you need to do."</i></p>
Work-Life Balance	Participants shared that Balint Groups helped them understand the importance of taking a break.	<p><i>"[Balint Groups] taught me that in order to make this sustainable, I cannot continuously keep going, and taking a break is also productive. It was also really hard to get into that mindset of like taking a break, is something that I don't need to be guilty of."</i></p> <p><i>"It's all of the extra time that I have to put in to make my job, work that really stresses me out because I have less time with my fiancé I have less time for myself."</i></p> <p><i>We need, you know, to have time to really prioritize your holistic health, you know, self care and so these are definitely some things that I think would work in preventing burnout, but it's not necessarily something that is emphasized because we have all these consistent deadlines and expectations to meet. Sometimes they're part of life which is actually essential and necessary as human beings and our existence can get swept under the rug and just lost in the sauce"</i></p>
Persistence		
Descriptive Code	Emergent Theme	Examples
Desire for Career Shift	Most participants shared a desire to shift to educational roles outside of the classroom	<i>"Just my experience throughout the first year, I started thinking about what was there a different role within education"</i>

Participant Perception

Descriptive Code	Emergent Theme	Examples
		<p><i>that will be better for you than being inside the classroom. Where you don't experience all of this burnout and this stress that affects your health but at the same time you're working in the capacity of your long term goals, to really have an impact in this field. So, it really caused me to just self-reflect, and even reflect on just the entire structure of the American education system"</i></p> <p><i>"I don't want to be in the classroom in five years, in five years I'd like to be in a Ph D program, doing research to support bilingual students who have disabilities. Making my way into the field of academia, and then hopefully you're pursuing a career at the graduate or undergraduate level. I think that going to the Balint Groups and hearing that pretty much everyone in the group experienced the same thing. And made me realize I just don't want to do this for the rest of my life."</i></p> <p><i>"I did want to go abroad and teach for a year, because I did study abroad, and I worked with education nonprofit, and I was also kind of comparing that to my experience this year in education here United States and I feel that I would want to actually teach abroad to have a more thorough comparison."</i></p> <p><i>"I honestly want to do something around financial literacy education, whether it's nonprofit whether it's a company, whether it's like some type of partnership I create for schools to I guess include in their curriculum something to do with financial literacy education. That's something I really want to be able to have my hands on within five years."</i></p>

Participant Perception		
Descriptive Code	Emergent Theme	Examples
		<p><i>“I’ve always wanted to do policy, education and [USTA] was like my little choice of I knew what that would look like or what I could work on, and I feel like I’ve got lots of ideas now after teaching.”</i></p> <p><i>“If you were to ask me that question that last year, I’d be like, I don’t know what I’m doing but now I’m like, I feel a little bit more confident knowing that I love teaching, and knowing that I love being with kids and making some type of impact. I’m actually feeling more confident knowing, I could say like, I want to apply for a Master of Education. It was through processing it with the Balint Group that really helped me get to that decision.”</i></p>
Lack of Sustainability	Participants believe that teaching is not sustainable	<p><i>“After being in the classroom for my first year, I quickly realized it’s not for me forever. Like, it’s not sustainable for me, just personally, because I do see a future for myself where I may have a family someday and I just couldn’t imagine having a family, and having kids of my own while also taking care of like other people’s kids....But, you know, even in my second year I would say, I’ve learned a lot more I’m a lot more like structured I have a lot better planning and better time management, but it’s still just something I don’t think it’s sustainable, at least in my life.”</i></p> <p><i>“I don’t think it’s sustainable in the current model that we have, because I know everybody on this call works more than 40 hours a week. And just like giving your heart and soul every day to kids that aren’t yours who you might not ever see again. And then, like, doing your best, and trying your hardest and</i></p>

Participant Perception

Descriptive Code	Emergent Theme	Examples
		<i>then getting feedback again and again that you need to be better.”</i>

Appendix T: Follow-Up Email on Attendance

Dear Balint Group,

Hope all is well with you. [REDACTED] and I have been discussing how to get the most out of the remaining two sessions that we have together. The first thing we would really like, if possible, would be for everyone to be in a place where they could have private video and audio. It really helps us, and the group, to be able to see people. Secondly, we want to remind those that haven't presented a case that there are only four more opportunities to do so. If you would like the experience of presenting a case, which really is an important part of Balint, you might want to be thinking about a student situation that you would want to bring to the group.

[REDACTED] to seeing you in April.

Albert and Sarat

Appendix U: Homewood Institutional Review Board Approval Letter



Homewood Institutional Review Board

3400 N. Charles Street
Wyman Park Building, Suite N468
Baltimore MD 21218-2685
410-516-6580
<http://homewoodirb.jhu.edu/>

Michael McCloskey, PhD
IRB Chair

Date: October 30, 2020

PI Name: Yolanda Abel
Study #: HIRB00011848
Study Name: Retention of Novice Teachers enrolled in a US Teacher Development Program

Date of Review: 10/30/2020
Date of Approval: 10/30/2020
Expiration Date: 10/30/2021

The above referenced study has been *approved*.

Review Type:	Expedited
Funding Agency:	Not funded
Grant or Contract Number:	
International Sites:	No
Maximum number of participants:	14
Vulnerable populations:	None
Consent process:	Written Informed Consent Survey/questionnaire consent
Assent Process:	

The Board determined that this research meets the criteria for submission of a Progress Report. The Progress Report must be submitted at least 6 weeks prior to the expiration date shown above on this notice. If the Progress Report is not submitted prior to the expiration date all ongoing research activities must stop immediately, including data analysis. Before any research activity can resume, you must submit the Progress Report.

No changes may be made to the protocol or the consent form without the approval of the Board.

Stamped approved consent documents may be found in the workspace for the above referenced item. Use copies of these documents to document consent. Only consent forms with a valid HIRB approval stamp or logo, with the correct IRB Approved version number and approval date may be presented to participants. All consent forms signed by participant enrolled in the study must be retained on file at JHU for three years after the study has been closed or completed, including all data analysis.

Please keep in mind that it is your responsibility to inform the HIRB of any adverse consequences to participants that occur in the course of the study, as well as any complaints from participants regarding the research. In conducting this research, you are required to follow the requirements listed in the *HIRB Policies and Procedures Manual*.

The stamped documents are available via the Stamped Document tab.

Approved Documents:

Written Consents:
Informed Consent

Recruiting Materials:
Recruitment Survey
Recruitment Email
Permission to Use [REDACTED]
Recruitment Blurbs for [REDACTED] Bi-Weekly Communications

Study Team Members:
Taquana Williams
Jermaine Ellerbe

APPROVAL IS GRANTED UNDER THE TERMS OF FWA00005834 FEDERAL-WIDE ASSURANCE OF COMPLIANCE WITH DHHS REGULATIONS FOR PROTECTION OF HUMAN RESEARCH SUBJECTS

Appendix V: Site Approval Letter

September 14, 2020

To the Johns Hopkins University Homewood Institutional Review Board (HIRB):

Our site does not have a formal IRB protocol or research approval process, however, as executive director of Teach For America Houston, I have the full authority to grant TaQuana Williams permission to conduct research at [REDACTED]. This letter documents the granting of full permission.

I understand that this research on novice teacher retention is for the purpose of the dissertation research for fulfillment of the EdD doctoral dissertation work at Johns Hopkins School of Education.

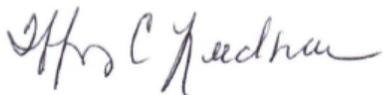
I am aware that TaQuana Williams' research is in compliance with and will be submitted for approval by HIRB and is approved by her Dissertation Advisers, Dr. Yolanda Abel and Dr. Jermaine Ellerbe. As executive director, TaQuana Williams has my full approval to conduct this study using corps members at [REDACTED].

TaQuana Williams specifically has my permission and approval to:

- Use the internal emails from our organization to recruit and solicit participants
- Use the organization's internal distribution system to have the recruitment sent out through our offices
- Use demographic data from [REDACTED]. These data will be deidentified in advance of their receipt and contain no code numbers or names of individuals so no personal information is shared
- Collect data from participants using random sampling of consenting volunteers who have been made aware that they may drop out at anytime.
- Collect data from participants via GoogleForms using the Pre- and Post-Test and Reflection Forms
- Collect qualitative data from a focus group and interviews with Teach For America corps members and alumni via the online Zoom platform. Semi-structured questions from the focus groups and interviews will surround teacher perceived persistence intentions, self-efficacy, experience with burnout in their roles, and experience in the Balint Group meetings.
- Conduct an intervention

We look forward to this research and believe it will enhance the performance of our organization

Sincerely,



Tiffany Cuellar Needham
Executive Director

Biographical Information

TaQuana Williams is an educational consultant based out of Houston, Texas. Born in Petersburg, Virginia and raised in Virginia Beach, Virginia, TaQuana always witnessed the systemic injustices engrained in the education systems in the United States. Thus, TaQuana has dedicated her career to serving schools and students in marginalized communities. TaQuana began her journey serving as a middle school English teacher. It was at that time, TaQuana obtained her Master of Science in Education and her Certification in Administration and Supervision from the Johns Hopkins University School of Education.

Following these accolades, TaQuana was able to increase her influence by becoming an instructional coach for novice teachers throughout the city of Houston. Despite her success working with novice teachers, TaQuana witnessed more and more teachers leaving the field of education because of the occupational stress they endured. This work inspired TaQuana to pursue her Doctor of Education with a concentration in Urban Leadership from the Johns Hopkins University School of Education. Now, TaQuana works for a national non-profit educational consulting organization where she can use her knowledge to support urban school districts and state educational agencies to develop strong academic systems for students from diverse backgrounds.

When she is not working in education, TaQuana enjoys traveling, spending time with friends, and graphic designing. TaQuana plans to continue her work consulting but aspires to go back into the school system, using all that she has learned to help urban school districts to provide strong and culturally responsive instruction to the most marginalized populations.