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Official and Unofficial Mentorship by Generational Cohorts of State Teachers of the Year

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Walden University
2017

Abstract

Official and Unofficial Mentorship by Generational Cohorts of

State Teachers of the Year

by

Angelica L. Jordan

MA, Hamline University, 1999

BA, Concordia College, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

K-12 Educational Leadership

Walden University

June 2017

Abstract

Some school districts are exploring mentorship to help teachers enact more effective classroom practices that lead to higher student outcomes. The Good to Great study, by the National Network of State Teachers of the Year outlined the professional growth opportunities that state teachers of the year (STOYs) perceived as contributing to their success in the classroom. Although the STOYs noted that mentorship was a key factor, the original study did not examine how different generations of educators may respond differently to mentorship based on their generational cohort identity. The purpose of this nonexperimental, causal-comparative study using Good to Great data was to examine how STOY Baby Boomers and Gen Xers perceived specific attributes of official and unofficial mentorship. Strauss and Howe's generational cohort theory and Zachary's mentoring theory provided the theoretical foundation. The research questions examined whether there was a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of (a) official mentors' and unofficial mentors' levels of empathy, (b) the alignment of personality to the mentee, and (c) their ability to offer support. In a secondary analysis of the existing data, Hotelling's T^2 tests indicated that Baby Boomers and Gen Xers did not show a significant difference in their overall perceptions of official nor unofficial mentoring factors. However, a post hoc analysis indicated that Baby Boomers had a significantly higher ($p = .01$) perception of official mentors' personality alignment to the mentee. The positive social change implication of this study is the potential to increase student learning by designing more effective mentorship programs to meet the needs of different generations of teachers.

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Dedication

This dissertation is dedicated to my loving family. Jason, when I began this PhD journey, our twins had just turned 5 years old. Within a month of starting the program, I changed jobs and we uprooted and moved. In the last year of the dissertation, I was promoted and this time we moved to a new country. Through all of this transition, you have been the constant for our family. Thank you for your love, support, and encouragement over the last six years. Thank you for sacrificing your dreams and aspirations for mine. You are my champion, my hero, and my forever love.

Andrew and Joseph, since the moment you entered school, I have been in school with you. I still remember the day, near the end of the dissertation, when you were encouraging me to keep writing, chanting, "Dr. Mommy, Dr. Mommy!" Not every day was full of such enthusiasm. There were many weekend days that you spent with your dad instead of me, so I could study. These days provided a valuable lesson too: Great accomplishments require grit, perseverance, and tenacity. As you grow into young men, you will remember that sometimes life is hard, and we push through it anyway. In the end, the path is yours and your dreams are waiting.

Mom and dad, through your love and support, I grew up with the self-belief that I could do anything. You valued education and instilled in me a love for teaching and learning. Even as an adult, I can feel your influence on my life. Mom, I know that you are watching me in heaven, cheering me on. Dad, even across the miles, you have been there for me each step of the way with your encouraging words.

To all of you, thank you. I love you forever and back again.

Acknowledgments

I would like to express my deepest gratitude to Dr. Alice Eichholz, my mentor and committee chair. My only regret is that I met Dr. Eichholz halfway into my program rather than on the first day. Your feedback, kindness, and support changed my perspective on the PhD process and allowed me to move forward with my goals. You truly understand adult learning and the mentoring relationship. I am thankful for your leadership, support, and guidance.

I would also like to thank Dr. Daniel Salter for sharing his expertise about quantitative statistics in a way that was meaningful and not intimidating. Your kind words and relaxed demeanor allowed me to focus on my analyses without anxiety. Thank you for taking the time to walk me through my study and for your commitment to helping me to reach my goals.

I want to thank the NNSTOY organization and their CEO, Katherine Bassett, for granting access to the original Good to Great study. This organization has become a pioneer in the field of teacher leadership, paving the way for aligning research, policy, and practice in education. I also would like to thank Catherine Jacques and the American Institutes for Research for organizing the logistics of sharing the data. Without these two organizations, this dissertation study would not have been possible.

Finally, I am eternally grateful to Walden University and their collaboration with the National Teacher of the Year program. Through their partnership, I received a full scholarship for my PhD studies. Thank you.

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Chapter 1: Introduction to the Study

In a pivotal moment in America's educational history, the National Commission on Excellence in Education released its deprecating report on the state of the educational system in the United States (Gardner, 1983). *A Nation At Risk* outlined how America's schools were failing students and how student achievement was in a dismal decline. Since then, educational leaders have proposed that the societal problem of low student achievement could be solved by providing teachers with professional development to improve their effectiveness (DuFour & Eaker, 1998; Ingersoll & Strong, 2011). One form of professional development, mentoring, has become a common practice in schools and districts throughout the United States (Lieberman & Hanson, 2012; Zachary, 2012). When done effectively, mentorship programs improve teacher practice and increase student achievement (Ingersoll & Strong, 2011). But different generations of teachers have responded differently to mentoring (Howe & Strauss, 2008; Zachary, 2012). Therefore, this study examined the differences in perceptions of official and unofficial mentorship by generational cohorts.

The participants were formally recognized K-12 state teachers of the year (STOYs). Understanding STOYs generational cohorts' views on mentorship in the context of their professional growth could provide a deeper understanding of how diversifying mentorship programs could help average teachers become excellent teachers. In the literature, there was limited information about this population of award-winning teachers. The educational community could use the findings of the study to design professional development that aligns with the needs of different generations of teachers,

and thus create more effective learning opportunities. This study has implications for positive social change: More teacher-centered mentorship programs take into account generational differences and thus have greater potential to influence teacher practice. By improving teacher practice, students could benefit from more effective instruction and enhanced educational experiences.

Chapter 1 covers the following topics: background of the study, problem statement, purpose, research questions and hypotheses, theoretical framework, the nature of the study, operational definitions, assumptions, scope and delimitations, limitations, and the significance of the study.

Background

The National Network of State Teachers of the Year (NNSTOY) is a nonprofit organization dedicated to supporting K-12 teacher leaders through policy, practice, and advocacy (Behrstock-Sherratt, Bassett, Olson, & Jacques, 2014). Recently, the organization has begun partnering with research companies to examine many aspects of teacher effectiveness. In 2014, NNSTOY published the results of the Good to Great study (Behrstock-Sherratt et al., 2014), which documented how STOYs perceived their professional growth across the career continuum, from preservice educators to becoming teacher leaders, and the factors to which they attributed to their success. According to the findings, 68% of the K-12 STOYs who had a mentor (53% of the overall group) listed mentorship as one of their top three factors that contributed to their effectiveness in the classroom. Although the researchers in the Good to Great study collected demographics

about each STOY's age group, these data were not used to examine how different generations perceived the role of official and unofficial mentorship in teacher growth.

This study analyzed how different generational cohorts perceived mentorship. Therefore, there were two theoretical frameworks for the study: Zachary's (2012) mentoring theory and Strauss and Howe's (1991) generational cohort theory. Mentoring theory (Zachary, 2012) focuses on how a mentoring relationship contributes to an adult's personal and professional learning. Mentors are knowledgeable advisors who guide the personal, professional, or educational journey of a mentee (Daloz, 2012). They may be officially assigned the role, such as instructional coaches or lead teachers, or they may serve as an unofficial mentor, working informally with a colleague to provide support and guidance as a peer, but without an official title or assignment (Bynum, 2015; Hull & Balka, 2009; Zachary, 2012). According to Zachary (2012), both formal and informal mentoring relationships progress through a cycle of preparation, negotiation, growth, and closure. Mentoring relationships might be strengthened by using generational cohort typology, that is, each generation has specific characteristics based on their shared historical and social experiences. Zachary recommended that mentors frame their mentoring relationship in the context of the generation.

Zachary's (2012) emphasis on generational context in mentorship aligned with Strauss and Howe's (1991) generational cohort theory. Strauss and Howe proposed that the each American generation lasts about 20 years and that the characteristics of each cohort are defined by their shared social and historical backgrounds, specifically during their formative years. These shared experiences have led to typical cohort attributes that

endure over time. Although there has been disagreement in the mainstream media about the defining years of each cohort, for the purposes of this dissertation research, Strauss and Howe's cohort definitions were used. Baby Boomers, born between 1943 and 1960 (Howe & Strauss, 2008), are known for their strong work ethic and independence. Gen Xers, born between 1961 and 1981, are characterized by their emphasis on productivity and collaboration. This cohort would prefer to work smarter, not harder. In today's K-12 educational institutions, the Baby Boomers are most often the veteran teachers and administrators, leading the schools (Howe & Strauss, 2008). The Gen Xers are the dominant generation of experienced teachers. Even with dramatically different values and life experiences, Baby Boomers and Gen Xers are expected to work collaboratively while leading and teaching today's schools. They are all committed to educating the next generation of students. Thus, mentorship programs that leverage the typical generational cohort characteristics have the potential to make a positive change in schools. In this research I examined how different generational cohorts of STOYs perceived official and unofficial mentorship as contributing to their professional growth.

Problem Statement

After years of research, Strauss and Howe (1991) introduced their generational cohort theory, which proposed that each generation in American society shared common experiences due to the trends and events of the time, leading to specific generational cohort descriptors. These differences are apparent in educators who approach teaching and learning from unique perspectives based on their cohort, and as such, may respond differently to mentoring (Zachary, 2012). As a result, Zachary (2012) suggested that

generational typology, the typical characteristics of each generation, might be used to support mentoring relationships. What was not found in the research literature was how different generations of successful teacher leaders perceived their work with official and unofficial mentors. Thus, this study addressed a gap in the literature by extending the findings about STOYs from the Good to Great study (Behrstock-Sherratt et al., 2014) and by examining the differences in the way each generation of mentees perceived official and unofficial mentorship.

Purpose of the Study

Using the data from the Good to Great study (Behrstock-Sherratt et al., 2014), this quantitative causal-comparative and ex post facto study sought to advance generational cohort theory (Strauss & Howe, 1991) and educational practice as they relate to the generational cohorts of Baby Boomers and Gen Xers and their views on official and unofficial mentors in their educational careers. Participants in this secondary analysis of the Good to Great data (Behrstock-Sherratt et al., 2014) included formally recognized K-12 STOYs from throughout the United States. The first independent variable was defined as a generational cohort with two distinct categories: Baby Boomers born between 1943-1960 and Gen Xers born between 1961-1981 (Strauss & Howe, 1991). The second independent variable was mentor status: official and unofficial mentors. The dependent variables were three: mentors' levels of empathy, alignment of personality to the mentee, and their ability to offer support (Behrstock-Sherratt et al., 2014). Because the existing dataset did not appear to distinguish between participants who had both an official and an

unofficial mentor, these attributes were treated in separate research questions rather than as conditions of a second independent variable.

Research Questions and Hypotheses

Two research questions were used in this study:

RQ1: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

H_{01}: There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A1}): STOY Baby Boomers will have significantly higher perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and/or the ability to offer support as compared with Generation Xers.

RQ2: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

(H_{02}): There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A2}): STOY Generation Xers will have significantly higher perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and/or the ability to offer support as compared with Baby Boomers.

Theoretical Framework

The theoretical frameworks in this dissertation research were Zachary's (2012) mentoring theory and Strauss and Howe's (1991) generational cohort theory. The major theoretical proposition for this research study was that different generations of teacher leaders, specifically Baby Boomers and Gen Xers, perceive official and unofficial mentorship differently. Together, mentoring theory (Zachary, 2012) and generational cohort theory (Strauss & Howe, 1991) offer support for this hypothesis. These frameworks are described in detail in Chapter 2.

According to Zachary (2012), mentoring theory explains how a mentoring relationship helps adult learners achieve their personal or professional goals. The primary role of the mentor is to assist the mentee by facilitating her or his learning by offering support, structure, reflection, and accountability. The mentor and mentee work together to meet the mentee's goals. Mentors can be formally assigned to the role or informally selected. Formal mentors operate within a predefined program that is often structured by a business or school to enhance professional learning (Bynum, 2015; Hull & Balka, 2009; Zachary, 2012). The organization sets the parameters for the relationship including outcomes, timelines, and accountability. On the other hand, informal mentorship is casual, and it is based on the needs of the mentee. The mentee selects a colleague or peer to serve as a mentor (Zachary, 2012). The structure and parameters of the informal mentoring relationship are negotiated together. Zachary suggested that both formal and informal mentoring relationships progress through a four-phase cycle: preparing,

negotiating, enabling growth, and closing. Although the cycle appears linear, it often moves in both directions to revisit ideas from each phase as need arises.

Mentoring theory highlights mentorship within the context of different generations. According to Zachary (2012), generational cohorts share some of the same characteristics that can be leveraged to enhance the mentoring relationship. For example, Baby Boomers tend to have a strong work ethic and often their identity is intertwined with their work accomplishments. Zachary's mentoring theory might be supported by the hypothesis that Boomers respond well to formal mentoring programs that have well-defined parameters. Gen Xers, on the other hand, are known for their entrepreneurial skills and productivity, but are skeptical of authority (Howe & Strauss, 1993). Zachary (2012) suggests that Gen Xers might respond more positively to competent, but informal, mentors. This application of mentoring theory was tested by analyzing the informal mentorship data from the Good to Great study (Behrstock-Sherratt et al., 2014) by generations. Zachary's (2012) mentoring theory relates well to Strauss and Howe's (1991) generational cohort theory because they use similar cohort descriptors.

Strauss and Howe (1991) define generational (20-year) cohorts by their birth year; a generational *cycle* consists of four generations (80 years) that reoccur in a fixed order. According to Strauss and Howe (1991), the four reoccurring generations are as follows: idealist, reactive, civic, and adaptive. Each generation is characterized by the shared experiences of its formative years. These historical and social experiences lead to common and predictable effects on the cohort (Howe & Strauss, 2008). In this study, I tested whether Strauss and Howe's cohort descriptors of Baby Boomers and Gen Xers

aligned with the generational cohort data on formal and informal mentorship, potentially adding support to the validity of both theories.

Both generational cohort theory and mentoring theory offer support for this research. Zachary's (2012) mentoring theory suggested that formal and informal mentoring relationships go through a learning cycle and that mentors may benefit from using generational cohort typology in working with mentees. Generational cohort theory (Strauss & Howe, 1991) delineates how each generation thinks and acts, based on shared experiences. Taken together, mentoring theory and generational cohort theory support the hypothesis that Baby Boomers, who respect traditional roles and values, might perceive official mentorship more positively than Gen Xers. On the other hand, Gen Xers, due to their mistrust of authority and their flexible nature, might perceive an unofficial mentor more positively than an official mentor. This study is expected to contribute to the field of educational research by testing and extending both mentoring theory and generational cohort theory.

Nature of the Study

This causal-comparative, ex post facto study was a secondary analysis of data collected from the quantitative, cross-sectional, Good to Great study (Behrstock-Sherratt et al., 2014). The purpose of the study was to examine three qualities that the mentee (STOY) attributed to increasing his or her effectiveness as an educator: the official or unofficial mentor's level of empathy, the alignment of the mentor's personality to the mentee, and the mentor's ability to offer support. Through disaggregating the data by generational cohorts, Baby Boomers and Gen Xers were compared to determine whether

there were differences in perceived attributes of official and unofficial mentorship based on their cohort.

Operational Definitions

Several terms are used throughout this dissertation to address specific aspects of the study. The technical terms are defined in this section for reference.

State Teachers of the Year (STOYs) are defined as teachers who were officially recognized by their state as the annual teacher of the year and who received the award from the Council of Chief State School Officers (CCSSO, 2016).

Official mentor is defined as a more knowledgeable professional who has been assigned the formal role of mentor, instructional coach, or teacher leader (Bynum, 2015; Hull & Balka, 2009; Zachary, 2012). Official mentors operate within predetermined parameters that are set by an organization.

Unofficial mentor is defined as a more knowledgeable professional who takes on the casual, informal role of guiding a colleague without the defined title of mentor (Bynum, 2015; Hull & Balka, 2009; Zachary, 2012).

Cohort is a generation of people that have developed similar traits and characteristics based on shared social, political, and historical experiences (Howe & Strauss, 2008).

Mentor's level of empathy is the level of compassion the mentor exhibits towards the mentee (Behrstock-Sherratt et al., 2014).

The alignment of personality to the mentee is defined as how closely the mentor's interests are complimentary to the mentee's interests (Behrstock-Sherratt et al., 2014).

Ability to offer support is how the mentor is able to provide helpful advice to the mentee (Behrstock-Sherratt et al., 2014).

Assumptions

This study was based on four assumptions.

- It was assumed that studying the population of STOYs would provide useful information for all teachers because all were originally inexperienced. STOYs noted mentorship as one of the key professional development experiences that led to their growth (Behrstock-Sherratt et al., 2014).

- It was assumed that participants who responded to the original Good to Great study (Behrstock-Sherratt et al., 2014) were honest and accurate. Dependable responses were important because the generational cohort data were disaggregated based on the age groups provided in the demographic section of the survey.

- It was assumed that categorizing participants by generational cohorts was a meaningful way to group participants.

- Since the results of this study were dependent on the quality of the original data collected, it was assumed that the Good to Great dataset provided by the American Institutes for Research (2014) was complete. Although the lead researcher provided assurances that the dataset was both accurate and complete, the original data collection was not under my control.

Scope and Delimitations

This research was focused on differences in how Baby Boomers and Gen Xers perceived both official and unofficial mentorship, although other generations may be represented in the overall instructional workforce. In K-12 schools, Baby Boomers are the teachers nearing retirement or serving as school level administrators, whereas Gen Xers are the experienced teacher leaders (Howe & Strauss, 2008). Although Baby Boomers and Gen Xers are at different career stages and have unique generational attributes, these two groups of educators are expected to work collaboratively to educate students. A study that emphasizes how each generation perceives mentorship could provide insight into how to maximize the professional learning opportunities for each generation of teacher leaders.

This study was delimited in three ways.

- The sampling frame for this study included all STOYs who were officially recognized by CCSSO as their state representative between 1970 and 2013 (Behrstock-Sherratt et al., 2014). The original Good to Great study was completed using an online survey, thus limiting the population to STOYs within the database of the NNSTOY electronic mailing list. Due to the limited sample population of the Millennial and Silent generations, this study included only two cohorts: Baby Boomers and Gen Xers. Data from other generations was excluded due to the limited sampling of participants born prior to 1943 or after 1981.

- Mentoring theory and generational cohort theory were selected as the theoretical framework for this study. Several theories could have been indirectly related to the context of the study but were not considered: adult learning theory, social learning theory, sociocultural learning theory, social cognitive theory, and organizational culture theory.

- This study examined a specific population of award-winning teacher leaders and the results may not be generalizable to other populations.

Limitations

This study used a secondary analysis of existing data. By its nature, secondary data analysis has limitations (Frankfort-Nachmias & Nachmias, 2015). The original dataset from the Good to Great study (Behrstock-Sherratt et al., 2014) used questions that only approximate the types of questions that could be asked if a survey were designed specifically for this study's research questions. Also, the original report on the Good to Great study did not contain information about how the instrument was tested for reliability in the scores. This information needed to be gathered through consultation with the original researchers and through testing the raw data for reliability.

In the case of the Good to Great study (Behrstock-Sherratt et al., 2014), the typical limitations of existing data use were countered through developing a collaborative partnership. The American Institutes for Research (2014) team provided access to the raw dataset for use and has provided a published description of the data collection process. The lead researcher was the point of contact for this study and provided information about the original study as questions arose.

In this case, the use of existing data was a timely, efficient, and cost-effective way to offer a new perspective about generational cohorts of STOYs, thus benefitting both the researcher and the NNSTOY organization.

Significance

This study was expected to contribute to the field of educational research by providing insights into how different generations of STOYs perceived the nature of official and unofficial mentoring relationships. This research study has practical implications for schools and districts throughout the United States that seek to increase the effectiveness of their official mentorship programs based on the needs of different generational cohorts of adult learners. Generational cohort data could be used to strengthen the relationships between mentee and mentor, building trust and leading to more effective mentoring. Furthermore, peer mentors may benefit from this study by using the generational data from unofficial mentorship to enhance how they engage with their colleagues on professional learning teams and through team teaching.

This study has implications for positive social change. Higher quality professional learning and more effective mentorship could lead to improved student outcomes. As K-12 schools, school districts, and states struggle to meet the needs of diverse student populations (DuFour, 2010), more effective mentorship programs would take advantage of the expertise of teacher leaders, and thus promote a more capable and diverse workforce (Bosso, 2014). By using generational cohort typology, school districts might design professional learning programs to support the mentor–mentee relationship and

more readily improve instructional practices. By increasing the effectiveness of teachers, quality mentorship programs might also enhance student learning.

Summary

In summary, this chapter introduced the dissertation study. School districts are using teacher mentorship as a method of increasing professional learning and student outcomes (Lieberman & Hanson, 2012; Zachary, 2012). The Good to Great study (Behrstock-Sherratt et al., 2014) examined the factors that STOYs perceived as contributing to their success in the classroom. However, the original study did not examine how different generations of educators may respond differently to mentorship based on their generational cohort identity. The purpose of this nonexperimental, causal-comparative study using Good to Great data was to examine how STOY Baby Boomers and Gen Xers perceived specific attributes of official and unofficial mentorship. Strauss and Howe's (1991) generational cohort theory and Zachary's (2012) mentoring theory provided the theoretical foundation. The research questions examined whether there was a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of (a) official mentors' and unofficial mentors' levels of empathy, (b) the alignment of personality to the mentee, and (c) their ability to offer support. The positive social change implications of the study include the potential for enhanced mentorship programs designed to better meet the needs of the mentee. This could lead to increased student outcomes within the school setting.

Chapter 2 includes a more detailed explanation of the theoretical frameworks and a thorough review of the current literature. In chapter 3, I discuss the research methods

including the research design, rationale, questions, hypotheses, and statistical tests. Next,

in Chapter 4 I describe the data screening and the results of the statistical analyses.

Finally, in Chapter 5 I interpret the results within the context of the theoretical

frameworks and the literature review. Chapter 5 also includes recommendations for

future research and the implications of the results.

Chapter 2: Literature Review

The purpose of this study was to advance generational cohort theory (Strauss & Howe, 1991) and educational practice with respect to the generational cohorts of Baby Boomers and Gen Xers and their views on official and unofficial mentors in their teaching careers. Existing data from the Good to Great study (Behrstock-Sherratt et al., 2014) was used. Thus, the participants were STOYs from the United States and its territories. By examining the mentors' levels of empathy, alignment of personality to the mentee, and ability to offer support, Baby Boomers and Gen Xers were compared to determine if there were differences in perceived attributes of official and unofficial mentorship based on their cohort.

Preview of the Chapter

The chapter introduction begins with the problem and purpose as they relate to the study. A brief synopsis of the literature is also included. The chapter continues with the scope of the literature reviewed and the search strategies used. Next, the theoretical frameworks of mentoring theory (Zachary, 2012) and generational cohort theory (Strauss & Howe, 1991) are described in depth, including an analysis of current research that supports or negates the theories. A rationale for the use of the theoretical frameworks and their relationship to the study is also provided. The next section of this chapter is an extensive review of the literature. The literature review includes current research about mentoring relationships, the characteristics of effective mentors, and generations as they relate to mentorship. Research findings about the study's dependent variables (mentor's level of empathy, ability to offer support, and personality alignment) are embedded into

these sections. Moreover, recurring research findings about unofficial and official mentorship are also presented. The chapter concludes with a discussion of research trends that revealed a gap in the literature as it relates to the current study.

Literature Search Strategies

To complete a review of the literature, academic databases were searched: Education Research Complete, ERIC, Sage Premier, ProQuest Central, Academic Search Complete, and SocINDEX with Full Text. Google Scholar was also used and cross-referenced with databases at Walden University. The following keywords were used: *induction mentoring*, *generational cohort*, *generational theory*, *mentoring theory*, *instructional coaching*, *mentoring and teachers*, *Teachers of the Year*, *mentoring and education,* and *mentoring and generations*. Limiting factors included peer-reviewed journal articles and publication dates between 2011 and 2016. Additional articles from the references in the selected articles were identified, retrieved, and reviewed.

The release of the National Commission on Excellence in Education's report, *A Nation At Risk* (Gardner, 1983)*,* highlighted how America's schools were failing students. For decades, educational researchers have proposed that professional development for teachers could lead to improved classroom instruction and better educational outcomes for students (DuFour & Eaker, 1998; Ingersoll & Strong, 2011). Mentorship programs are one strategy that schools and districts throughout the United States are implementing to transform teacher practice (Lieberman & Hanson, 2012; Ingersoll & Strong, 2011; Zachary, 2012). However, the research about how different generations of teacher leaders respond to mentorship was unclear.

Strauss and Howe's (1991) generational cohort theory suggested that each generation of Americans grows up experiencing common societal trends and historical events, leading to specific cohort descriptors. For instance, a Baby Boomer who was raised by a parent of the Great Depression would likely grow up to have a strong work ethic and sense of community. However, a Gen Xer who was raised as a latch-key child of a dual income family might be more independent and less trusting of authority. These differences are evident as educators approach teaching and learning from unique perspectives based on their cohort affiliation and therefore may respond differently to mentoring (Zachary, 2012). In her mentoring theory, Zachary suggested that the use of generational typology could enhance mentoring relationships.

Much of the research on mentoring focuses solely on teacher induction or specific program evaluations (Ingersoll & Strong, 2011). However, there are limited data available about how different generations perceive mentorship. Furthermore, few studies were found that examine the population of STOYs and the professional development that helped them grow (Bosso, 2014). Therefore, this study further analyzed the generational cohort data collected about STOYs from the Good to Great study (Behrstock-Sherratt et al., 2014) to help identify differences in how each generation perceived selected attributes of official and unofficial mentors. This research addressed gaps in the literature through examining a broader scope of participants from throughout the United States and by providing a unique perspective on how different generations of STOYs perceived the nature of official and unofficial mentoring relationships.

As school districts strive to support continued teacher growth, the results of this study could be used to design more effective learning opportunities for teachers that are differentiated to meet the needs of each generational cohort. Through developing teacher-centered mentorship programs that take into account generational differences, school districts have the potential to greatly influence instructional practice. The positive social change implications of this study include the transformation of teacher practice leading to more effective instruction, improved educational experiences for students, and possibly higher student achievement.

Synopsis of Current Literature

The foundation of this dissertation research was based on a synthesis of Zachary's (2012) mentoring theory and Strauss and Howe's (1991) generational cohort theory. Mentoring theory (Zachary, 2012) describes how mentoring relationships help adult learners achieve their goals. The primary role of the mentor is to facilitate the mentee's learning through offering support, structure, reflection, and accountability. According to Strauss and Howe's (1991) generational cohort theory, different cohorts may perceive mentorship through a unique perspective. Strauss and Howe defined generational cohorts by their birth year, noting that a generation lasts approximately 20 years. Moreover, the theorists proposed that each generation is characterized by their shared experiences during their formative years, leading to common and predictable effects on the cohort (Howe & Strauss, 2008). Thus, the success of a mentoring relationship might be influenced by the generational differences between cohorts.

When reviewing the literature about mentorship, themes emerged that supported Zachary's (2012) mentoring theory and Strauss and Howe's (1991) generational cohort theory. First, researchers agreed with Zachary (2012) who proposed that building an effective mentoring relationship was a vital part of assisting the mentee to grow (Arora & Rangnekar, 2014; Daloz, 2012, Efron, Winter, & Bressman, 2012; Howe & Jacobs, 2013; Lieberman & Hanson, 2012; Zachary, 2012). Through creating an open, honest dialogue, teacher mentees felt that they were able to trust their mentors and were able to take risks to try new instructional techniques (Efron et al., 2012). Furthermore, researchers concurred that mentors were most effective when they employed adult learning theory (Edge, 2014; Holyoke & Larson, 2009; Lee, Krauss, Suandi, & Hamzah, 2014; Linder, Eckhoff, Igo, & Stegelin, 2013) as suggested by Zachary (2012). When a mentor facilitated dialogues and designed collaborative opportunities to learn such as lesson studies and professional learning teams, mentees learned from their peers and from self-reflection.

An in-depth review of the variables for this dissertation study revealed that personality alignment between the mentor and mentee was beneficial to the mentoring relationship (Eriksson, 2013; Pogodzinski, 2012). When both parties had similar beliefs and ideals, the mentees reported interacting more often across all topics (Pogodzinski, 2012). Also, emotional support and empathy for the mentee positively contributed to mentoring relationship (Efron et al., 2012; Israel, Kamman, McCray, & Sindelar, 2014; Linder, 2011; Pogodzinski, 2012; Wasburn, Wasburn-Moses, & Davis, 2012). In one study, participants reported that their mentors' emotional support and empathy were

intertwined with their instructional and professional support (Israel et al., 2014). Thus, empathy was a vital component of mentoring. The literature also revealed that mentors were more successful when they had the ability to offer long-term, ongoing professional support to teachers (Linder, 2011; Meixia & Carlson, 2013; Polly & Hannafin, 2011; Vale et al., 2010). In a study by Polly and Hannafin (2011), participants noted that the continuous support of the mentor helped them bridge the gap between professional learning and classroom application. The mentor's ability to offer support appeared to influence the effectiveness of the mentoring.

The research about generations and mentorship concluded that mentoring relationships were important to all cohorts (Daloz, 2012; Edge, 2014; Merriweather & Morgan, 2013). However, different generations preferred different communication methods and teaching strategies (Edge, 2014; Gómez and Arias, 2015; Houck, 2011, Merriweather & Morgan, 2013; Zachary, 2012). Boomers preferred face-to-face meetings and phone calls to e-mail and text messages whereas Gen Xers were more tech-savvy with e-mail and preferred short meetings only when the content could not be covered asynchronously (Edge, 2014; Houck, 2011). Interestingly, a study by Gardiner, Grace, and King (2013) found that nearly half of all participants rejected the generational stereotype descriptors as they related to their self-identity. Therefore Gardiner et al. (2013) concluded that mentors might be most effective by building a relationship and understanding the mentee's self-identity rather than relying on Strauss and Howe's (1991) generational cohort descriptors.

Theoretical Foundation

A theoretical framework can be used to provide explanations and predictions of research observations (Frankfort-Nachmias & Nachmias, 2015). In this study about mentoring and generational cohorts of STOYs, a theory before research approach was selected. The two theoretical frameworks that were used to guide the study were mentoring theory (Zachary, 2012) and Strauss and Howe's (1991) generational cohort theory.

Mentoring Theory

In mentoring theory, Zachary (2012) outlined the process of mentoring adult learners to guide their professional growth, specifically in the field of education. Zachary's (2012) mentoring theory highlights the shift from a traditional, mentor-directed transmission of knowledge, to a collaborative, learning-centered model. Based on the principals of adult learning, Zachary (2012) emphasized the role of the mentor as a facilitator of learning through reflection and application. Formal mentors operate through an organization such as a school or business. In formal mentorship programs, the parameters for expectations, timelines, and accountability are usually set by the organization. On the contrary, Zachary described informal mentorship as more naturally occurring and casual, based on the needs of the mentee. The relationship progresses at its own pace and develops its own structure. Zachary noted that both formal and informal mentoring relationships progress through the same learning cycle. The four-phases of the mentoring model include: preparing, negotiating, enabling growth, and closing. The

model is intended to be bidirectional, offering movement both forward and backwards within the cycle, based on the needs of the mentee.

At the onset of a mentoring relationship, Zachary (2012) suggested that the mentor begin with the preparing phase to reflect on his or her own professional journey and to plan for facilitating the journey of another. Zachary noted that the mentor was a facilitator rather than an authority, a key concept in working with adult mentees. During this phase, the mentor works to build a relationship with the mentee through engaging in mentoring conversations and getting to know each other. The conversations provide a context for mentoring such as understanding religious, cultural, social, and generational differences. These open and honest conversations build trust between the mentor and mentee, setting the background of the mentoring relationship.

Once a rapport has been established, Zachary (2012) proposed that mentors might move onto the negotiating phase, or the business agreement, of mentoring. During this phase, a mentor and mentee work to align their thinking about the details of the mentoring relationship. Learning goals, outcomes, timelines, processes, and accountability are negotiated collaboratively. Addressing soft issues such as confidentiality, boundaries, and any sensitive topics during this phase of mentoring will also help to build trust and avoid pitfalls during the next phase of the cycle.

The third part of Zachary's (2012) cycle is the enabling growth phase. It is during this phase that the mentor and mentee work together to meet the learning outcomes through open and honest communication and feedback. Often with numerous setbacks and obstacles, this is the most crucial phase in the cycle. Zachary referenced Daloz's

(2012) three core conditions for facilitating learning as a model for the enabling growth phase. First, the mentor supports learning through managing the relationship (Daloz, 2012; Zachary, 2012). Through listening, maintaining a positive attitude, and providing structure, the mentor encourages a learning environment. Next, both Daloz (2012) and Zachary (2012) suggested that mentors facilitate growth through inspiring forward momentum. Engaging in discussions, setting tasks, and evaluating outcomes collaboratively help the mentee to maintain focus. Finally, the mentor can encourage movement through fostering reflection and checking in with the mentee on a regular basis. Providing constructive feedback will ensure that the mentee's learning goals are met and will enable continued growth.

The final phase of Zachary's (2012) mentoring cycle is closing the learning agreement. During this phase, the learning outcomes are reviewed and the accomplishments are celebrated. Zachary recommended that mentors include a discussion about closure in the initial negotiating phase to plan the end of the mentoring relationship. In formal mentoring programs, closing the relationship is usually determined through an established timeline. However, finding closure in informal mentoring relationships may be more challenging because there is no prescribed end date. Closure could include celebrating the goals that were achieved and outlining the mentee's next steps. When done effectively, closure allows for the mentee to evaluate the learning and provides a readiness to apply it to other areas.

In addition to the mentoring cycle, Zachary (2012) contended that generational typology, or the typical characteristics of each generation, could be used to enhance the

mentoring relationship. For example, Zachary proposed that Baby Boomers are often work-oriented and self-reliant. They are known to be independent thinkers and hold others to high standards. In a mentoring relationship, they want to be both supported and challenged. Zachary suggested that when mentoring Boomers, mentors should praise accomplishments and hard work while providing challenging new opportunities. Also, Baby Boomers would appreciate a tone of respect but not necessarily understand highly technical terms or jargon. By contrast, Zachary characterized Gen Xers as entrepreneurial, productive, and skeptical. As a result, Gen Xers might prefer mentors who are informal yet competent and direct. Zachary recommended that mentors of Gen Xers encourage the mentee to take control of their own learning, avoiding micromanagement, but also providing consistent feedback on their progress. A trusting relationship is important in all mentoring relationships, but specifically to Gen Xers. Zachary's mentoring theory and its focus on generational typology showed a strong connection to Strauss and Howe's (1991) generational cohort theory.

Various studies have been shown to support and extend Zachary's (2012) mentoring theory (Campbell, Smith, Dugan, & Komives, 2012; Lee et al., 2014). When examining the mentoring relationship as it related to leadership outcomes, Campbell et al. (2012) found that both formal and peer mentors helped their mentees achieve higher outcomes. However, the study specified that this was the case only when the mentor used specific psychosocial mentoring processes, building a strong relationship with the mentee. The Campbell et al. study suggested that Zachary's (2012) mentoring cycle was effective with both formal and informal mentorship relationships.

Another study by Lee et al. (2014) examined Zachary's (2012) mentoring theory as it related to mentoring practices contributing to mentee learning. In their quantitative study, Lee et al. (2014) concluded that the mentoring relationship and the role of the mentor as facilitator or coach were both significant predictors of mentee learning. This study supported Zachary's (2012) mentoring theory as facilitating the self-development of the mentee through the process of active coaching.

In this research I used existing data about official and unofficial mentorship to relate Zachary's (2012) mentoring theory to generational cohorts. The research questions asked how teacher leaders from different cohorts perceived their mentors' level of empathy, alignment of personality to the mentee, and the ability to offer support as contributing to their own professional growth. Using the data from this study, Zachary's mentoring theory could be extended to compare Baby Boomers and Gen Xers within the field of mentorship.

Generational Cohort Theory

Another theoretical framework for this study was Strauss and Howe's (1991) generational cohort theory. According to Mannheim's (1927) seminal work, *The Problem of Generations,* each age group develops a cohort identity through entering adulthood during shared political and historical events. Strauss and Howe (1991) adapted and expanded generational cohort theory to address the cycle of generations based on shared sociological experiences and how these experiences influence common characteristics of group cohorts. According to Strauss and Howe, cohorts are defined by birth year and through their respective placement on the generational cycle. Each generation has a

unique location in history that has enduring, common, and predictable effects on the cohort (Howe & Strauss, 2008).

In their original work, Strauss and Howe (1991) proposed that there are four primary cycles through which each American generation passes during an approximate 20-year period. The generational types reoccur in a fixed order. First, a dominant generation termed the *idealist generation* grows up as indulged youth after a societal crisis. These youth become narcissistic adults but eventually become wise elders, ready to lead the next generation through a new impending crisis. Strauss and Howe noted that the current Baby Boomers, born between 1943 and 1960, are a part of the idealist generation. Having come of age during the 1960s and 1970s, the Boomers were raised with postwar optimism but became known for youth anger and social turmoil. This led to a generation that was both values-obsessed and argumentative.

Later works by Howe and Strauss (2008) expanded on their original theory to extend this thinking about generations to the K-12 educational community. Having grown up in a time of worsening educational outcomes, as Baby Boomers became teachers in the 1980s and 1990s, they brought with them an intense work ethic and the ideology that higher education was a pathway to success. In K-12 schools today, Boomers are the veteran teachers of the schools and most of the administrators. Baby Boomers are more likely than any other generation to view themselves as *workaholics* who felt called to the profession of teaching. In accordance with this philosophy, Boomers often put in extra hours without additional compensation. They are zealous about professional autonomy and independence, preferring to close their classroom doors and work alone. Boomers

often become experts in one area and have a depth of knowledge about their teaching subject or grade level. With their work ethic and ideals, as school leaders the Boomers have created an aggressive agenda of curricular and assessment reforms with the intent of instilling these generational values back into the educational system.

Strauss and Howe (1991) named the next generation in the cycle the *reactive generation*. This cohort grows up as unprotected and criticized youth and become risk-taking but alienated adults. Strauss and Howe categorized the 13th generation, another term for Gen Xers, as the reactive generation. Born between 1961 and 1981, the Gen Xers are currently the dominant generation of teachers (Howe & Strauss, 2008). This generation is known for a weaker work ethic but a stronger market ethic. Gen Xers value accountability and productivity over process and principles. As a result, Gen Xers are more comfortable with job-turnover and K-12 reforms such as vouchers, incentive pay, and flexible scheduling. Unlike Baby Boomers, Gen Xers value breadth over depth. This group of teachers is more willing to change teaching assignments, explore new technologies in the classroom, and bring a multidisciplinary approach to teaching. Collaborative work is typical of this cohort who sees the value of a common planning block, team teaching, and being part of a professional learning team. Gen Xers prefer to work smarter, not harder because they view work as a means to enjoy life. The Gen Xers' focus on personal life over career aspirations can sometimes be a source of tension between the Gen X teachers and their Baby Boomer administrators.

The third generation in the cycle is the *civic generation* (Strauss & Howe, 1991). These children are raised by the reactive generation and thus are more protected and

outward fixated. They become adults who build up institutions. These are the current Millennials, born between 1982-2002. The Millennials are just entering the teaching profession as the novice teachers (Howe & Strauss, 2008). Having grown up as protected youth who followed the rules, the Millennial workforce desires to feel protected and special. Unlike the Boomers and Gen Xers who were independent enough to learn through job experience alone, the Millennials want to feel supported as new teachers. They excel with specific feedback and structure. As such, Millennials are amenable to coaching, mentoring, and team teaching. They have a sense of social responsibility and want to make a positive impact in their community, making them a good match for their Baby Boomer administrators.

The final generation in the cycle is the *adaptive generation* (Strauss & Howe, 1991). Dubbed by Howe and Strauss (2008) as the Homeland generation, born after 2003, adaptive generation youth are over-protected and suffocated by their parents due to a secular crisis, namely 9-11. This upbringing will likely create well-behaved, diligent, and imaginative children. In schools, these are the sheltered students who are struggling to be taught and led by independent Gen Xer teachers and Baby Boomer administrators. However, as young adults, the Homeland generation will have a tendency to be naïve, risk-adverse, and conformist. Their adulthood is predicted to be plagued by indecision and may garner less influence than other generations.

Strauss and Howe's (1991) generational cohort theory has been critiqued in numerous studies (Becton, Walker, & Jones-Farmer, 2014; Gardiner, Grace, & King, 2013; Houck, 2011). In a study by Gardiner et al. (2013), the researchers found that

although participants felt that generational stereotypes were accurate and a valid way to group people in the workplace, the same participants did not self-identify with their own generational cohort characteristics. On the contrary, nearly half of all participants identified most closely with the cohort descriptors of Baby Boomers. Furthermore, less than 25% of Gen Xers and 10% of Millennials identified with their own cohort. This study concluded that Strauss and Howe's (1991) generational cohort descriptors were not congruent with an individual's self-identity.

According to Becton et al. (2014), although not outright refuting generational cohort theory, other researchers have cautioned that developing programs and professional development that cater to generational cohort characteristics may not be the most effective use of time and money. Becton et al. examined how generational differences between Baby Boomers, Gen Xers, and Millennials influenced work place behaviors. The researchers hypothesized that Baby Boomers would have lower job mobility, be more compliant with rules, and be more willing to work overtime as compared with Gen Xers and Millennials. The results indicated that their hypotheses were correct but there was a small effect size. They concluded that differentiating workplace practices for different cohorts could be a waste of resources.

In her study of multigenerational workforce mentoring, Houck (2011) posited that specific concepts from generational cohort theory were vital contributors to successful mentorship. Although generational stereotypes about work ethic and education may vary for individuals within a generation, her research found overwhelming support for each generation's preference for technology use and communication based on age. Having

grown up without modern technology, Baby Boomers preferred mentors who communicated face-to-face and over the phone. Gen Xers and Millennials came of age during a time of increased daily use of technology. Technology has become embedded into how younger generations live. Mentors who differentiated their technology use and communication styles with mentees of different generations were more effective. Houck's (2011) study validated Strauss and Howe's (1991) generational cohort theory.

In addition to various studies confirming or refuting Strauss and Howe's (1991) generational cohort theory, it is important to note that different researchers have defined the generations using a variety of birth years and timelines (Edge, 2014; Gardiner et al., 2013; Holyoke & Larson, 2009; Houck, 2011). For instance, Strauss and Howe's (1991) timeline identified Boomers as born between 1943 and 1960. Other researchers have defined Baby Boomers as born between 1946 to 1964 (Gardiner et al., 2013; Houck, 2011) and 1946 to 1965 (Edge, 2014). The differences in the definition of Gen Xers' birth years were even more pronounced. Strauss and Howe (1991) identified Gen Xers as born between 1961 and 1981. Other researchers defined Gen Xers as born between 1965 to 1976 (Gardiner et al., 2013), 1964 to 1980 (Houck, 2011), 1966 to 1980 (Edge, 2014), and 1960 to 1980 (Holyoke & Larson, 2009). Depending on the definition, a research participant born between 1960-1965 could be a Baby Boomer or Gen Xer. This discrepancy in the overlapping years of the cycle could lead to different research results about generational cohort characteristics.

Rationale for Theoretical Framework

In this dissertation research study about generational cohorts of STOYs and their perceptions of mentoring relationships, the application of Strauss and Howe's (1991) generational cohort theory offered insights into how Baby Boomers and Gen Xers perceive official and unofficial mentorship, based on the distinct characteristics of the generation. Furthermore, Zachary's (2012) mentoring theory and her emphasis on generational typology expanded the use of generational cohort theory (Strauss & Howe, 1991) to the framework for mentoring relationships. Together, mentoring theory (Zachary, 2012) and generational cohort theory (Strauss & Howe, 1991) provided a solid theoretical foundation for the study.

Literature Review of Key Variables and Concepts

The scholarship on mentoring is robust, covering varied aspects across professional fields (Merriweather & Morgan, 2013). In this literature review I synthesize relevant recent research about effective mentoring relationships and the characteristics of effective mentors. A critical analysis of generations and mentoring, official mentorship, and unofficial mentorship is included. Finally, I discuss current trends in the research and the resulting gaps in the literature.

Effective Mentoring Relationships

Building an effective mentoring relationship was a focal point of the literature (Arora & Rangnekar, 2014; Daloz, 2012, Efron et al., 2012; Howe & Jacobs, 2013; Lieberman & Hanson, 2012; Zachary, 2012). Efron et al. (2012) examined a teacher mentorship program and discussed the influence of relationships. Teachers (mentees)

reported that as they built a trusting relationship with their mentor, they were more likely to ask for help and try new instructional techniques. However, Efron et al. also noted that building relationships takes time and that effective mentorship is ongoing. Furthermore, mentoring relationships were more successful when supported by the school administration and when the roles of both the mentor and the mentee were well defined. Communicating and supporting the context of the mentoring program were noted as successful elements of the program. Based on this study, an official mentor with a defined role might be more successful than an unofficial mentor.

A study by Howe and Jacobs (2013) concurred that successful mentors built strong, collaborative relationships. In their study, educators valued when a mentor provided emotional support, built their confidence, and gave them the opportunity for reflection about professional practice. Teachers reported that their mentors built a sense of community and helped them to solve problems while encouraging professional growth. Similarly, Thomas, Bell, Spelman, and Briody (2015) reported that when mentors used a collaborative approach, engaging teachers as equal partners, the results showed that instructional coaching conversations improved. Interactions changed over time to include more teacher discussions and participation in the professional development activities. In both Howe and Jacobs' (2013) study and Efron et al.'s (2012) study, the mentor built a community of learners in addition to a relationship with the mentee. This created a web of support for the mentees.

In another study, Arora and Rangnekar (2014) examined the role of mentoring relationships and their prediction of career resilience. The researchers used two categories

of mentoring: career and psychosocial. The results of the study indicated that

psychosocial mentoring (defined as friendship, role modeling, and acceptance) was a

significant predictor of career resilience. On the contrary, career mentoring (offering

performance strategies, coaching, and challenging tasks) did not have a significant effect

on career resilience. Campbell et al. (2012) cited similar results in their research about

what mentoring tasks had a high impact on the development of the mentee. They noted

that there was a significant influence on the mentee when mentors focused on

psychosocial development, specifically autonomy, interdependence, and a sense of

purpose (Campbell et al., 2012, p. 616). Building a trusting relationship as a part of the

psychosocial mentoring encourages the continued growth of mentees (Arora &

Rangnekar, 2014; Campbell et al., 2012).

Characteristics of Effective Mentors

Researchers concurred that mentors are most effective when they are viewed as

credible (Linder et al., 2013; Yang, Hu, Baranik, & Lin, 2013), employ adult learning

theory (Edge, 2014; Holyoke & Larson, 2009; Lee et al., 2014; Linder et al., 2013), have

specific personality traits (Lee et al., 2014; Linder, 2011; Linder et al., 2013; Polly, 2012;

Sayler et al., 2013), and offer ongoing job-embedded support (Linder, 2011; Meixia &

Carlson, 2013; Polly & Hannafin, 2011; Vale et al., 2010).

Mentors are effective in helping teachers transform their practice when the

mentee views the mentor as credible (Linder et al., 2013, Yang et al., 2013). In a study by

Linder et al. (2013), the researchers surveyed over 500 elementary teachers to examine

the characteristics of influential elementary math instructional coaches. The results

indicated that the coaches were rated as more credible when they had both content and pedagogical knowledge. When facilitators had either strong content knowledge or teaching knowledge, teachers did not rate them as influential mentors. Primary teachers were also concerned that the coaches understood effective practices for the social, emotional, and developmental needs of young children. Additional research found that mentors who received training to increase their mentorship skills were found to be more credible and more effective at educating their mentees, specifically in career functions (Yang et al., 2013). When mentees view their mentors as credible, they are more willing to apply their mentor's suggestions.

In addition to maintaining credibility, mentors who employ the principles of adult learning are also more successful (Lee et al., 2014; Linder et al., 2013). Linder et al. (2013) reported that participants rated instructional coaches who used management techniques that honored adult learning theory such as facilitation, group work, modeling, and making connections to classroom applications as more effective. A quantitative study by Lee et al. (2014) corroborated these findings. The researchers concluded that mentors who used facilitation techniques to coach their mentees, rather than using a traditional authoritarian approach, were more effective at influencing the learning of the mentees. In both studies, the application of adult learning theory increased the outcomes for the mentees (Lee et al., 2014; Linder et al., 2013).

In a unique study about adult learners and generational cohorts, Holyoke and Larson (2009) found that all generations showed an interest in learning when the teaching modeled adult learning theory. However, their research indicated that Gen Xers were the

most willing to learn on the job. They cited that Gen Xers were highly engaged when they found connections between the materials, their classmates, and their professional applications. Boomers were most interested in learning when the teaching was delivered in a traditional environment but also seen as contributing to their personal growth. These findings were confirmed by Edge (2014) who found that Gen Xers exhibited a strong desire to continued professional learning as compared with their Boomer and Millennial colleagues. When the mentor used adult learning theory to directly connect the new learning to practice, all generations showed an interest in applying the skills (Holyoke & Larson, 2009). This research supported Zachary's (2012) mentoring theory that emphasized the role of the mentor as a facilitator of adult learning through reflection and application.

Adult learners prefer mentors with specific personality traits (Eriksson, 2013; Lee et al., 2014; Linder, 2011; Pogodzinski, 2012; Polly, 2012; Sayler et al., 2013). In a study by Linder (2011), teachers reported on the effective characteristics of mentors: credibility, support, motivation, management/organization, and personality. If the mentors were missing any of the five traits, they were viewed as ineffective overall. Teachers reported that mentors were more effective when they exhibited specific personality traits such as being friendly, outgoing, calm, humorous, and relaxed. On the contrary, the research showed a negative reaction to other personality traits such as being rude, arrogant, and opinionated. Lee et al. (2014) also affirmed that trust, empathy, and mutuality were significantly beneficial to the mentee.

Personality alignment between the mentor and mentee, a key dependent variable in this study, was also found to be beneficial to the mentoring relationship (Eriksson, 2013; Pogodzinski, 2012). Eriksson's (2013) qualitative study found that "a mismatch in personal chemistry and attitudes" (p. 278) between the mentor and mentee led to numerous obstacles throughout the term of mentorship. Another study showed that when mentors were aligned with their mentees, the mentees were more likely to interact with the mentors on a regular basis and across all topics (Pogodzinski, 2012). Effective mentors practice supportive, knowledgeable, and humble mentorship.

The mentor's ability to offer support to the mentee was another dependent variable in this research study. Researchers concurred that emotional support and empathy for the mentee contribute to the effectiveness of mentorship (Efron et al. 2012; Israel et al., 2014; Linder, 2011; Pogodzinski, 2012; Wasburn et al., 2012). Linder (2011) reported that elementary math teachers were more willing to change their practices when they felt like their formal mentor was there to support their growth through active listening and encouragement during meetings and in follow-up encounters. These findings concurred with Israel et al.'s (2014) examination of mentorship in special education. Participants reported that the mentor's emotional support, specifically their level of empathy to understand difficulties, was interwoven into instructional and professional assistance. In the mentoring model studied by Efron et al. (2012), the mentors worked diligently to gain the trust and confidence of the mentees. "The emotional support the mentors offered to the teachers and the confidence the teacher felt toward them enabled the mentors to provide positive feedback as well as constructive

criticism" (Efron et al., 2012, p. 345). In all three studies, changes in practice occurred as a result of the combination of emotional and professional supports.

In studies comparing formal and informal mentorship, research indicated that novice teachers viewed emotional support as a key component of all types of mentorship (Pogodzinski, 2012; Wasburn et al., 2012). One study found that there was no statistical difference between the emotional support offered by informal mentors as compared to formal mentors (Wasburn et al., 2012). The participants felt that both formal and informal mentors offered similar emotional support structures. Yet, Pogodzinski's (2012) mixed method study yielded contrary findings. In this study, novice teachers reported that the emotional support of their peer mentors was more important than the support they received from their formally assigned mentors. The difference was statistically significant for teachers at the elementary and middle school levels. More notably, the emphasis of emotional support from informal mentors over formal mentors maintained for the first three years of teaching. Although the literature had varying results when comparing the levels of emotional support from informal and formal mentors, it was conclusive that emotional support was a necessary component of all mentoring.

In addition to emotional support, successful mentors offer long-term, ongoing professional support to teachers (Linder, 2011; Meixia & Carlson, 2013; Polly & Hannafin, 2011; Vale et al., 2010). Teachers who received ongoing support in the form of coteaching, professional dialogues, or reflections were more likely to try new methods and adapt their practices (Linder, 2011). In an examination of elementary math instruction, participants categorized the ongoing support of the mentor as a major factor

contributing to their changes in instructional practice (Linder, 2011, p. 57). The participants recalled experiences where they implemented a new teaching strategy because they felt confident that their mentor would provide support. Vale et al. (2010) affirmed this when gathering data about instructional coaches in an elementary setting. The coaches remarked that job-embedded professional learning was "an effective model that will gain strength over time as teachers who are feeling inundated are starting to see it as support rather than an imposition...as profitable and practical" (p. 65). In another study, teachers were more successful with integrating new methods into instruction when given job-embedded guided practice in lesson design and delivery (Meixia & Carlson, 2013, p. 382). Polly and Hannafin (2011) also discovered that when mentors offered continuous support, this provided scaffolding for the transition between teachers learning about new techniques and implementing the new pedagogies with students. Mentors who commit to a long-term support of the mentee help the mentee become more successful in the classroom.

Generations and Mentoring

The literature about mentoring different generations was extensive. Zachary (2012) described how to mentor adults effectively, including intergenerational understanding. Zachary proposed that Baby Boomers, born between 1943 and 1960, are known for their work ethic, linking their self-worth to the quantity and quality of their accomplishments. Boomers also regard those in authority with respect (Edge, 2014; Zachary, 2012). A study that focuses on generational differences and mentorship might find that Boomers prefer working with an official mentor compared with an unofficial

mentor. Conversely, Zachary (2012) noted that Gen Xers, born between 1961 and 1981,

are regarded as entrepreneurial and individual, maintaining a general distrust of authority.

This generation prefers freedom, flexibility, and informal structures to traditional

workplace constructs (Edge, 2014). Thus, an unofficial mentoring relationship might

prove most beneficial to this generational cohort.

Just as the literature on mentoring relationships confirmed, the literature within

generational mentoring also cited that the most effective mentors build relationships and

foster open communication (Daloz, 2012; Edge, 2014; Merriweather & Morgan, 2013).

Edge (2014) found that Gen Xers and Millennials tended to have less trust in their

workplace than Baby Boomers who displayed higher levels of relational trust. As a result,

she recommended that school leaders consider ways to build a climate of

intergenerational trust within the school culture. Merriweather and Morgan (2013)

described the challenges and opportunities with intergenerational mentorship and the

balance of power that comes with undefined mentorship roles. When the mentor relies on

cultural or generational stereotypes rather than taking time to understand the mentee's

perspective, the mentoring relationship can be negatively affected. However, this can be

counteracted with other cultural connections such as shared experiences, gender

connections, and life style choices.

The results of another study of generations in the workplace concurred that

emphasizing generational cohort descriptors over individual needs could have a negative

impact. After researching generations in the workforce, Becton et al. (2014) warned

against "treating employees simply as members of generations, ignoring the fact that

other individual differences likely play a more prominent role in workplace behaviors than generational differences" (p.185). The researchers noted that although there were some common characteristics of generational behaviors in the workplace, the time and money spent by human resources to meet the needs of each generation might be more effectively used to design professional development activities that are flexible enough to meet the needs of individuals. Although some researchers found that individual differences were more prominent than generational differences, other researchers came to the opposite conclusion.

Additional studies suggested that mentoring different generations requires different communication methods and teaching strategies (Edge, 2014; Gómez and Arias, 2015; Houck, 2011, Merriweather & Morgan, 2013; Zachary, 2012). Gómez and Arias (2015) found that mentors who could not effectively communicate with their mentee did not help the mentee change instructional practices. In the workplace, both Houck (2011) and Edge (2014) found that Boomers preferred face-to-face meetings and phone calls to asynchronous communications such as e-mail and text messages. Gen Xers were described as more tech-savvy with e-mail and preferred short structured meetings only when the content could not be covered asynchronously. Houck (2011) proposed that mentorship programs tailor their communication use to meet the preferred style of each generation when possible. Additionally, Houck (2011) and Edge (2014) both recommended two-way mentoring that allows the Boomers and Gen Xers to share their work experience with Millennials but also allows Millennials to help the older generations adapt their technology habits to the current practices. This two-way

mentorship honors the expertise of each generation and acknowledges the value of a multigenerational workforce.

Research about generational cohort identity and age group identity also plays a role within mentoring relationships (Weis & Lang, 2012; Zachary, 2012). Weiss and Lang's (2012) research showed that age-group identity was more likely to be negative, including feelings of loss and decline. That is, as people aged, they related to their physical age group negatively, focusing on how their age has limited their ability. On the contrary, generation identity was characterized by positive attributes and a sense of social group affiliation. For example, Baby Boomers noted pride in their work ethic and sense of morality. In mentoring relationships, generational cohort identification can be a strong indicator to the mentor about how to work successfully with the mentee (Zachary, 2012).

In a different study, Gardiner et al. (2013) examined the congruency between the traditional generational cohort descriptors and each generation's self-identity. Unlike Weiss and Lang (2012), Gardiner et al. (2013) found that between 18 and 25% of all respondents identified more with another cohort as compared with their own. Overall, 40% of Millennials and Gen Xers identified themselves as matching the Baby Boomer profile. The researchers also reported that, even with the mismatch, participants believed that using generational typology to group people was generally effective. However, participants rejected the generational stereotypes as they related to their self-identity. These results aligned with Daloz (2012) who proposed that different generations may not respond to traditional mentorship techniques and that a trusting relationship with open-communication would foster a more effective mentoring relationship.

Taken together, the literature implies that although educational mentorship might benefit from using differentiated techniques with each generation, mentors might be most effective by building a relationship with the mentee and understanding the mentee's self-identity rather than relying on Strauss and Howe's (1991) generational cohort descriptors.

Official Mentorship in Education

Official mentors in a school setting might be given the title of mentor, instructional coach, specialist, or instructional leader (Bynum, 2015; Hull & Balka, 2009). The research on formal mentorship within the field of teaching and learning is abundant. Formal mentors provide psychosocial support and work with mentees to transform instructional practice (Desimone et al., 2014; Eriksson, 2013; Israel et al., 2014; Pogodzinski, 2012; Wasburn et al., 2012). Furthermore, specific coaching activities such as coplanning, facilitating professional learning teams, and coteaching lessons lead to changes in teacher practice and gains in student achievement (Chval et al., 2010; Jong et al., 2010; Linder, 2012; Hull & Balka, 2009). Unlike the other themes in the literature, researchers disagree about the role of mentors as evaluators (Israel et al., 2014; Polly, 2012; Sayler et al., 2013).

In support of Zachary's (2012) mentoring model, researchers concur that formal mentorship follows a structure and provides a combination of emotional and professional support (Desimone et al., 2014; Eriksson, 2013; Israel et al., 2014; Pogodzinski, 2012; Wasburn et al., 2012). In Wasburn et al.'s (2012) review of a special education mentoring program, the mentees reported that mentors provided emotional support, professional advice, encouragement, and confidence. Likewise, the mentors successfully assisted

teachers with classroom management, instructional techniques, and implementing the curriculum. Wasburn et al. reported that the "formal mentoring roles encompassed both what teachers say they want (assistance with classroom management, emotional support) and what researchers believe they need to improve their practice (curriculum implementation)" (p. 64). According to the mentees, the structures that were embedded into the formal mentorship program, including goal setting, observations, and feedback, were reported as time consuming but yielded positive results in their professional practice. Additional studies found that emotional support, coupled with direct professional advice, eased the application of new strategies into classroom practice (Desimone et al., 2014; Pogodzinski, 2012). Mentees relied on their formal mentors for support with curriculum, teaching strategies, observations, feedback, and student behavior, especially in the beginning of the year. The formal structures of the mentoring meetings such as timelines, goals, observations, and roles, provided an outline for the mentoring process.

In a qualitative examination of a formal group-mentoring model, Eriksson (2013) also noted that the organization of the model could influence the success of the mentorship. Participants in this study noted that they were frustrated when some mentors used an undefined structure or had poor communication skills. Other negative aspects of the mentoring included a lack of differentiation to meet the mentee's needs and a misalignment in personalities. Conversely, mentors who used the principles of adult learning, as recommended by Zachary (2012) and Daloz (2012), were rated more positively. These mentors consulted the mentees to coplan the mentoring discussions,

foster reflection, and keep an open dialogue (Eriksson, 2013). Formal mentorship programs with structures in place were viewed as most effective.

In addition to the organizational supports for mentorship, formal coaching activities such as coplanning, facilitating professional learning teams, and coteaching lessons have been shown to influence teacher practice (Chval et al., 2010; Israel et al., 2014; Jong et al., 2010; Linder, 2012; Hull & Balka, 2009). Polly and Hannafin (2011) found that coplanning lessons with a mentor or an instructional coach led to higher level student engagement and student-centered pedagogies compared to when teachers planned lessons independently (p. 128). The researchers found that independently planned lessons were lacking the forethought and attention to details needed to successfully implement the planned activities. When the same lesson outline (sequence of activities) was planned, teachers who collaboratively planned the lesson with a mentor were more likely to include student-centered techniques, such as the use of concrete materials and student social interaction. Furthermore, the gap between the espoused practice (intended lesson) and the enacted practice (actual lesson taught) was minimized (Israel et al., 2014; Polly & Hannafin, 2011). Teachers who planned with a mentor were more successful at implementing sound instructional techniques.

The professional learning team experience can be enhanced when a mentor or an instructional coach is facilitating the conversations and helping teachers to focus on student-centered instruction (DuFour, 2010, Harbin & Newton, 2013; Israel et al., 2014; Vale et al., 2010). By definition, a professional learning team is an "ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action

research to achieve better results for the students they serve" (DuFour, 2010, p. 11).

Together, educators study curriculum, instruction, and assessment and determine the

most successful practices to achieve results. Based on data and research, teachers

determine the scope and sequence of instruction, coplan lessons, write common formative

assessments, and review the results. Within the setting of a professional learning team,

mentors clarify what good instruction looks like and present the research behind best

practices (Harbin & Newton, 2013; Israel et al., 2014). These professional dialogues

about instruction help teachers connect theory with practice (Eriksson, 2013; Harbin &

Newton, 2013; Wasburn et al., 2012). Vale et al. (2010) also found that when coaches

engaged with professional learning teams, encouraging collaborative planning and

supporting teachers' mathematical content knowledge and instructional practice,

improved student learning occurred (p. 64). The mentoring model (Zachary, 2012) and

the professional learning team model (DuFour & Eaker, 1998) are complementary

methods of helping teachers to improve their practice through structured reflection and

goal setting.

There were disagreements in the literature about whether or not mentors could be

effective if they were also serving in the role of evaluator (Israel et al., 2014; Polly, 2012;

Sayler et al., 2013). In many mentoring and coaching models, the mentors worked

diligently to earn the trust of the mentees (Efron et al., 2012; Polly, 2012; Sayler et al.,

2013). For instance, in Efron et al.'s (2012) study, mentors "reported that they intensively

invested time and energy to overcome teachers' anxiety and suspicion by making the

mentoring experience a safe place built on confidence and trust" (p. 345). The mentors

assisted the teachers whereas the administrators evaluated teachers. The separation of

mentor and evaluator built trust between the mentor and mentee. Similarly, in Sayler et

al.'s (2013) study, the student-centered coaching model ensured that the teacher and

coach were collaborators, working to meet the needs of the teacher and students

simultaneously, rather than the coach assuming the role of evaluator or expert. Polly's

(2012) research also noted that effective mentors were viewed as supporters and leaders

of teachers, not evaluators of teachers. In a unique study by Israel et al. (2014), the

mentors served as the evaluators of teachers as well. The teacher mentees expressed

variable levels of comfort with the dual role of the mentor as evaluator, ranging from

ambivalence to discomfort. In the end, all mentees in the study rated the mentoring as

effective at improving their instructional practices.

Official mentorship programs are defined by their structures and outcomes

(Zachary, 2012). Instructional coaches, formal mentors, and curricular specialists could

all serve teachers in this official capacity (Bynum, 2015; Hull & Balka, 2009). As a

generation, it may be more likely that Baby Boomers, with their respect for authority,

strong work ethic, and desire to achieve, find official mentorship as more desirable than

unofficial mentorship (Zachary, 2012). Furthermore, an examination of informal

mentorship trends might align better with the Gen X teachers who prefer a less prescribed

and more flexible style of professional learning.

Unofficial Mentorship in Education

Unofficial or informal mentoring in education is a vital source of support for

novice teachers (Bynum, 2015; Desimone et al., 2014). In contrast to a formal mentorship

program that is developed by an organization, informal mentoring develops spontaneously and naturally based on the learning needs of the mentee (Bynum, 2015). Unofficial mentorship is self-directed and less structured than formal mentorship and may grow organically from job-embedded learning structures (Bynum, 2015; Preston, Ogenchuk, & Nsiah, 2014). The literature about informal mentoring centered around three main points. First, researchers found that job-embedded learning such as professional learning teams (McConnell, Parker, Eberhardt, Koehler, & Lundeberg, 2013; Thessin, 2015; Williams, Brien, & LeBlanc, 2012) and lesson studies (Sayler et al., 2013) naturally contributed to peer mentorship. Second, informal mentoring was emotionally and professionally beneficial to educators (Desimone et al., 2014; Pogodzinski, 2012; Preston et al., 2014; Wasburn et al., 2012; Yang et al., 2013). Finally, multiple studies recommended organizational mentorship training for all teachers who engage in informal mentoring (Desimone et al., 2014; Pogodzinski, 2012; Wasburn et al., 2012).

Just as official mentors serve in a variety of leadership roles, unofficial mentors are often teacher leaders who take on additional responsibilities but without a prescribed title (Bynum, 2015). A common practice for unofficial mentors is to facilitate professional learning teams, assisting their colleagues with analyzing student work and sharing effective practices (McConnell et al., 2013; Thessin, 2015; Williams et al., 2012). In a study comparing virtual and face-to-face professional learning teams, McConnell et al. (2013) found that both formats of learning contributed to peer mentorship. The teachers noted that participation in the learning team increased their professional discourse and sharing and led to stronger professional relationships. Similarly, Thessin's

(2015) examination of effective professional learning teams found that collaborative school cultures were a vital prerequisite to learning teams. When all teachers, not just the lead facilitators, were trained on the professional learning team process, the team became more effective at influencing student achievement. Through informal mentorship within the professional learning team model, teachers assisted their colleagues with instructional decisions through coplanning and data analysis.

In a study involving over 50 schools, Williams et al. (2012) had similar findings while reviewing the attributes of professional learning teams that effectively transformed teacher practice. The researchers determined that job-embedded mentoring and advice sharing increased when a mentor supported the learning teams and this led to a heightened use of best practices. Eighty percent of teachers reported that their work with their colleagues (informal mentorship) supported their professional growth whereas only 38% of teachers perceived their schools' official mentorship program as contributing to teachers' growth. Furthermore, Williams et al. concluded that shared leadership about pedagogical and policy matters built teacher leadership capacity and strengthened the professional learning of colleagues. In all three studies (McConnell et al., 2013; Thessin, 2015; Williams et al., 2012), teachers noted that the peer mentorship grew naturally from professional learning teams and was a key factor in encouraging best practices in the classroom through fostering professional growth.

Lesson studies, another collaborative learning experience facilitated by peer leaders, have also been shown to help educators improve their instructional practices (Sayler et al., 2013). In Sayler et al.'s review of South Dakota's Project PRIME, teacher

leaders facilitated lesson studies through a process referred to as the Learning Lab Initiative. Learning Lab teams on each grade level met monthly to follow the lesson study cycle of planning, teaching, observing, and reflecting. After a lesson was planned together, a classroom teacher would agree to host the lesson while the other team members observed. Project PRIME participants commented that the Learning Labs were beneficial because they allowed teachers to observe student learning and instructional practices in the classrooms of their peers and then reflect on the experience as it pertained to their own practice. The teachers had the opportunity to engage in two-way peer mentorship. According to Sayler et al., the peer mentoring embedded into the Learning Labs provided teachers the feedback and ongoing support they needed to implement changes to their practice. Lesson studies and professional learning teams are both structures that support the process of informal mentorship leading to changes in teacher practice.

Researchers have also examined the benefits of informal mentorship within the field of education (Bynum, 2015; Desimone et al., 2014; Pogodzinski, 2012; Preston et al., 2014; Wasburn et al., 2012; Yang et al., 2013). Their findings revealed three main benefits of informal mentorship as compared with formal mentorship: interpersonal attraction, emotional support, and consistency of support. An unofficial mentoring relationship grows naturally based on the needs of the mentee and the desire of the mentor to offer assistance (Bynum, 2015; Preston et al., 2014). This interpersonal attraction can create a strong mentoring bond. Several studies have concluded that the mentor and mentee are better aligned when the relationship was not officially assigned

but self-selected (Desimone et al., 2014; Pogodzinski, 2012; Preston et al., 2014; Yang et al., 2013). In Desimone el al.'s (2014) study of 57 novice mathematics teachers, participants reported that they chose informal mentors based on their perceptions that they shared complementary personality traits. These similar characteristics fostered trust and confidence in the relationship. Another study of novice teachers indicated that mentees who were aligned with their informal mentors interacted more frequently across all mentoring topics (Pogodzinski, 2012). "The level of shared goals, shared values, similar preferences for work climate…between novices and their mentors affects the extent of socialization including impacts on both practice and retention" (Pogodzinski, 2012, p. 986.) The mentees felt more comfortable conversing with their informal mentors when they could identify with them. The alignment of the personality of the mentor and mentee was another key variable in this dissertation study. This research would suggest that personality alignment is more likely found in unofficial mentoring relationships.

Informal mentorship provides interpersonal comfort based on a mutual attraction (Preston et al., 2014; Yang et al., 2013). In Yang et al.'s (2013) study, research indicated that when both the mentee and mentor were interested in the mentoring relationship, the relationship became symbiotic. The mentee would seek out the informal mentor for advice and then express gratitude after successfully implementing new techniques in the classroom. This reinforcing feedback led to more frequent interactions between the mentor and mentee, strengthening the informal bond. Both parties saw a benefit from the mentoring relationship. This study was later supported by Preston et al. (2014) when they

determined that the role of the mentor and mentee could become blurred, allowing both people in the mentoring relationship to act as a learner and teacher based on their skills and ability. Informal mentoring was advantageous to both the mentor and mentee.

Another benefit of unofficial mentorship is emotional support (Desimone et al., 2014; Pogodzinski, 2012; Wasburn et al., 2012), a key variable in this dissertation study. In Desimone et al.'s (2014) study of mathematics mentoring, mentees reported that they were over twice as likely to receive emotional support from their informal mentors as compared to their formal mentors. Furthermore, the mentees noted that they could be emotionally vulnerable with their peer mentors because they were unconcerned about accountability and evaluation. Other studies also found that mentees relied on their informal mentors for emotional support such as encouragement, increasing their teaching confidence, and general advice giving (Pogodzinski, 2012; Wasburn et al., 2012). In a study comparing formal and informal mentorship during teacher induction, Pogodzinski (2012) concluded that novice educators interacted with their peers more for psychosocial support. The mentees also ranked the support from their unofficial mentors as more important than the support they received from their official mentors. This research suggested that informal mentorship could be considered a vital component of professional development for educators.

The consistency of support that is provided to the mentees is another benefit of peer mentorship (Desimone et al., 2014; Pogodzinski, 2012; Preston et al., 2014; Wasburn et al., 2012) and a key variable within this dissertation study. Research indicated that informal mentors interacted more often with their mentees as compared to

official mentors (Desimone et al., 2014; Preston et al., 2014). Novice teachers in one

study reported that they worked with their informal mentor more often because they were

easily accessible (Desimone et al., 2014). The mentees relied on their colleagues for

immediate support with setting expectations, parental involvement, and emotional

support. Nearly half of the participants responded that they sought out their informal

mentor because they were close by and consistently available. Preston et al.'s (2014)

research concurred with Desimone et al. (2014). In Preston et al.'s (2014) qualitative

study of peer mentorship, participants reported that the logistics of informal mentorship

were key contributors to the success of the mentoring. Specifically, the mentees noted the

benefits of timing, proximity, and flexibility with regards to interacting with their

unofficial mentors. Participants in Pogodzinski's (2012) research also commented on

how informal mentors were consistently available. The mentees cited the support of their

peer mentors to help them integrate the norms, policies, and values of the school that

were often shared by the formal mentor. The informal mentors bridged the gap between

policy and practice. However, one study reported that, although novice teachers showed a

preference for informal mentors, the research on outcomes did not support their

preference (Wasburn et al., 2012). In this contrasting research, the formal mentors

actually provided more consistent support than the informal mentors. These differences,

although not further addressed in the research, could be attributed to the quality of the

formal mentoring program based on the training and socialization of mentors.

Numerous studies recommended organizational mentorship training for all

teachers who engage in informal mentoring (Desimone et al., 2014; Pogodzinski, 2012;

Wasburn et al., 2012). When discussing the results of their study of formal and informal mentorship with novice teachers, Desimone et al. (2014) suggested that the formal mentoring programs monitor the activities and interactions of informal mentors to design a complementary program. "Integrating the role of informal mentors into the array of induction supports is consistent with the idea of developing a more coherent system of supports for teachers across teacher education, induction, and professional development" (Desimone et al., 2014, p. 103). Pogodzinski (2012) also recommended that teacher leaders and administrators plan a more consistent level of socialization and support for novice teachers through fostering professional development within informal mentoring relationships. Training for informal mentors could offer guidance about how mentorship could improve teacher practice through crucial support structures such as observation and feedback (Wasburn et al., 2012). Through training formal and informal mentors, an organization could maximize the potential of both types of mentoring relationships.

Research Trends

The literature and research about generations, official mentorship, and unofficial mentorship was abundant. Within the literature, recurring themes surfaced such as the importance of a strong mentoring relationship and the characteristics of effective mentors. Other themes discussed in this literature review included how different generations perceive mentorship, and how support structures such as professional learning teams could enhance the mentoring relationship. Through an extensive review of the current literature, research trends in the field of generations and mentoring also emerged.

The research about generations and mentorship was evenly dispersed between quantitative, qualitative, and mixed methods. However, on a more detailed examination, trends about the content of the studies became apparent. Both quantitative and qualitative research about mentoring often reviewed specific programs with a small participant base (Efron et al., 2012; Eriksson, 2013; Howe & Jacobs, 2013; Israel et al., 2014; Lee et al., 2014; Preston et al., 2014; Sayler et al., 2013; Thomas et al., 2015). Also, research within the field of educational mentorship focused on teacher induction (Desimone et al., 2014; Ingersoll & Strong, 2011; Israel et al., 2014; Pogodzinski, 2012).

Researchers who examined single mentorship programs often selected a qualitative approach (Efron et al., 2012; Eriksson, 2013; Howe & Jacobs, 2013; Israel et al., 2014; Preston et al., 2014). Open-ended questionnaires and narrative journal analysis were common data collection methods. In Efron et al.'s (2012) study of the Teacher Mentoring for Growth program, ten teachers, four mentors, and seven administrators completed naturalistic questionnaires every 6 months. The researchers analyzed the written responses for themes to describe the mentoring process, mentoring relationships, and the impact of mentorship on teachers' professional practice. Similarly, Eriksson's (2013) review of a group mentorship model gathered data from 103 participants' written responses to four prompts. These prompts were intended to initiate a narrative about how the mentoring program contributed to the mentee's professional growth and classroom practice. Written journals were also analyzed in the Howe and Jacobs (2013) study. However, Howe and Jacobs examined the mentorship program through the lens of the three mentors who reflected on how their participation in the program influenced the

classroom practice of the ten mentees. In a study on peer mentorship, Preston et al. (2014) used narrative inquiry to describe how the dual role of mentor and mentee contributed to positive change for ten peer mentors. In each study, researchers focused on describing the experiences and perceptions of the participants rather than collecting quantifiable data about the mentorship programs.

Within the trend of program evaluation, some researchers did select a quantitative approach (Lee et al., 2014; Sayler et al., 2013; Thomas et al., 2015). In a study designed to correlate mentoring processes and mentee learning outcomes, Lee et al. (2014) used a survey to measure the knowledge, skills, and attitudes of the mentees. Although there were 90 participants in this Malaysian mentorship study, Lee et al. noted that their research was specific to the culture and did not take into account cultural and social norms. Thomas et al. (2015) also selected quantitative methods to review an instructional coaching program that spanned three years. The program included professional development workshops for teachers, coteaching sessions with coaches, and weekly coaching meetings. In their program evaluation, the researchers used an instructional coaching scale to determine how coaching conversations influenced teacher practice at five elementary schools. Results indicated that the teachers and their mentors moved from implementation conversations to discussing classroom practice over the 3-year period. Both Lee et al. (2014) and Thomas et al. (2015) cautioned that their studies were limited to the specific programs under review.

Another program evaluation was Sayler et al.'s (2013) review of Project PRIME, a math achievement initiative in South Dakota. This 10-year longitudinal study included

an outline of effective teaching practices and the professional development activities that
supported teachers to gain the skills necessary for reform-based math instruction. Each
component of Project PRIME was evaluated including professional development
workshops, graduate coursework, lesson studies, instructional coaching, and
administrator training. The longitudinal data from the first seven years was used to
modify the last three years of Project PRIME's implementation to meet the needs of
middle school teachers. Over 400 surveys from instructional coaches, mentors, teachers,
and administrators were analyzed as part of the review. Student achievement data from
14,500 students was also collected to show student growth in mathematics. Although the
review showed that Project PRIME was successful at increasing students' math outcomes
and influencing teacher practice, the results of the study were specific to Project PRIME.
In both the qualitative and quantitative studies, since each mentorship program was based
on different parameters, the studies were neither reproducible nor generalizable to other
contexts.

Another research trend within the literature was to examine mentorship during
teacher induction (Desimone et al., 2014; Ingersoll & Strong, 2011; Israel et al., 2014;
Pogodzinski, 2012). Teacher induction includes the support, guidance, and orientation of
beginning teachers to the profession of teaching or to the school site (Ingersoll & Strong,
2011). In their review of the literature, Ingersoll and Strong (2011) reported that within
the last two decades, teacher induction research has shown that new teachers are more
likely to report job satisfaction and to continue teaching when a mentor supports them.
Moreover, teachers who participated in mentorship programs during teacher induction

also developed stronger classroom management skills and their students scored higher on achievement tests.

In a 5-year, mixed methods, longitudinal study comparing formal and informal mentorship during teacher induction, Desimone et al. (2014) concluded that beginning teachers relied on formal mentors and informal mentors differently. Official mentors supported new teachers with observations, feedback, and policies. Mentees also relied on formal mentors for advice about classroom management and content specific pedagogies. Informal mentors, however, were more likely to offer emotional support and advice about students. Moreover, mentees interacted more with their mentors when they were well matched with grade level and content areas. As a result of the study, Desimone et al. recommended that school districts include both formal and informal mentorship training to their experienced staff members as part of their professional development programs.

Other studies about mentorship during teacher induction concurred with Desimone et al.'s (2014) conclusion. In a mixed methods study reviewing formal mentoring across the Midwest, Pogodzinski (2012) found that mentees interacted with their mentors most frequently about student behavior, curriculum, and teaching strategies. The interactions also increased in frequency when the mentee felt that the mentor was well aligned by grades or subjects. Mentees also reported that they interacted more with their close colleagues for psychosocial support. The mentees also rated their peer support as more important than the support they received from official mentors. Like the Desimone et al. (2014) results, Pogodzinski's (2012) research indicated that districts

might benefit from including both formal and informal mentorship training within their support structures for new teachers.

In a qualitative study about formal mentorship during teacher induction, Israel et al. (2014) found that formal mentors used evaluative criteria during observations to help their mentees improve. These observations and feedback, although designed to support changes in classroom practice, were noted by the mentees as psychosocial support as well. Emotional and professional supports were interrelated. Israel et al. also recommended that future research include studying the variables about mentor and mentee characteristics. Furthermore, the researchers noted that this study was limited to the mentoring program under review and suggested that additional research be conducted to broaden the scope of the findings. Based on the research trends in the literature and the recommendations for future research, gaps in the current literature emerged.

Gaps in the Literature

An extensive review of the literature indicated gaps in two main areas. First, although there was a great deal of research about mentorship, a large portion of the empirical evidence about teacher mentorship has been specific to school programs or district initiatives, creating data that may not be generalizable to other contexts (Efron et al., 2012; Eriksson, 2013; Howe & Jacobs, 2013; Israel et al., 2014; Lee et al., 2014; Preston et al., 2014; Sayler et al., 2013; Thomas et al., 2015). Also, the current literature on STOYs was limited to a handful of published studies (Bosso, 2014). No studies were found in the online database search engines. NNSTOY is beginning to research this population of award-winning educators, but the scientific studies were still limited.

Furthermore, no studies could be found that specifically addressed how K-12 STOYs from different generations perceived official and unofficial mentorship. This dissertation research study addressed the gaps in the literature through using a broader scope of participants (STOYs from across the United States) rather than reviewing a specific mentoring program. Also, the research provided data about the understudied population of STOYs, offering a unique perspective on how different generations of successful teacher leaders perceived the nature of official and unofficial mentoring relationships.

Summary

The literature suggested that mentoring was most successful when mentors considered adult learning theory, built solid relationships, and had specific personality traits (Arora & Rangnekar, 2014; Daloz, 2012; Edge, 2014; Efron et al., 2012; Eriksson, 2013; Holyoke & Larson, 2009; Howe & Jacobs, 2013; Lee et al., 2014; Lieberman & Hanson, 2012; Linder, 2011; Linder et al., 2013; Pogodzinski, 2012; Polly, 2012; Sayler et al., 2013; Zachary, 2012). Personality alignment between the mentor and mentee, empathy, and the ability to offer professional support were all deemed as vital to impacting the success of the mentoring relationship (Efron et al. 2012; Eriksson, 2013; Israel et al., 2014; Linder, 2011; Meixia & Carlson, 2013; Pogodzinski, 2012; Polly & Hannafin, 2011; Vale et al., 2010; Wasburn et al., 2012). Additionally, the research on generations and mentoring concluded that different generations might respond more favorably to different methods of communication, specifically when new technologies were used (Edge, 2014; Gómez and Arias, 2015; Houck, 2011, Merriweather & Morgan, 2013; Zachary, 2012).

Although the literature was well balanced with regards to methodologies, two main research trends were apparent. First, numerous studies were program evaluations with a small scope of participants (Efron et al., 2012; Eriksson, 2013; Howe & Jacobs, 2013; Israel et al., 2014; Lee et al., 2014; Preston et al., 2014; Sayler et al., 2013; Thomas et al., 2015). Also, the literature on mentorship focused on teacher induction (Desimone et al., 2014; Ingersoll & Strong, 2011; Israel et al., 2014; Pogodzinski, 2012). What was unclear in the research was how different generational cohorts of teacher leaders throughout the United States perceived the importance of personality alignment, empathy, and the mentor's ability to offer support. No studies were found that focused on each generation of teachers and their preference for official or unofficial mentorship. Furthermore, there were no studies available that highlighted the population of STOYs and their perceptions of mentorship.

This study was expected to contribute to the current body of knowledge about mentorship and generations through providing new insights into how STOYs perceived the attributes of both official and unofficial mentors as contributing to their professional growth. Schools and districts could use the results of the study to design more effective mentorship programs that positively impact classroom practice. When teachers are supported in their professional growth, students benefit from instruction that meets their needs.

In Chapter 3, I discuss the research questions and present the hypotheses. The research design, rationale, and methodology that were used in the study are also presented.

Chapter 3: Research Method

This quantitative, causal-comparative study relied on existing data from the Good to Great study (Behrstock-Sherratt et al., 2014). The purpose was to examine how STOY Baby Boomers and Gen Xers perceived specific attributes of official and unofficial mentorship. Strauss and Howe's generational cohort theory and Zachary's mentoring theory provided the theoretical foundation. The results of this study could be used to design mentorship programs that are better able to meet the professional learning needs of teachers from different generational cohorts. More effective mentorship could lead to more effective teaching practices, thus impacting educational outcomes in K-12 classrooms.

Chapter 3 includes a discussion of the research design and rationale, research questions and hypotheses, and an in-depth examination of the research methodology. In the methodology section, I explain the sampling population, data collection procedures, and the method of data analysis. I also provide a detailed description of the threats to validity and ethical considerations for the study.

Research Design and Rationale

The research design of the study was quantitative because the purpose of the study was to examine the difference between two groups of the independent variable using a research instrument that produces data for statistical analysis (Frankfort-Nachmias & Nachmias, 2015). A quantitative approach is appropriate when the research involves using a deductive approach to examine numerical data. Furthermore, only a quantitative approach to research can be used to infer that there are significant differences

between two groups (Patten, 2004; Trochim, 2006). Qualitative and mixed method research approaches were not seen as appropriate for this study because the intent was neither to explore a phenomenon nor understand an individual perspective using inductive reasoning (Frankfort-Nachmias & Nachmias, 2015).

This study was a secondary analysis of data collected from the Good to Great study (Behrstock-Sherratt et al., 2014); it used a cross-sectional survey design. To answer the research questions thoroughly, the study was nonexperimental and causal-comparative. The latter design is used to compare two groups with one independent variable (Frankfort-Nachmias & Nachmias, 2008; Trochim, 2006). This design aligned with the purpose of the study because, by disaggregating the data by generational cohort, I compared Baby Boomers to Gen Xers to determine if there were differences in perceived attributes of official and unofficial mentorship based on their cohort.

The primary independent variable was the generational cohorts. The two groups of this independent variable in the study were Baby Boomers and Gen Xers. A second independent variable—which is discussed in more detail below—was mentor status, also categorized into two groups: official and unofficial. The dependent variables were selected from the Good to Great study (Behrstock-Sherratt et al., 2014) and included the three qualities that the mentee (STOY) attributed to increasing his or her effectiveness as an educator: the official and unofficial mentors' (a) levels of empathy, (b) alignment to the personality of the mentee, and (c) the mentors' ability to offer support. These responses were rated on a Likert-type scale, from 1 (*not at all important*) to 5 (*very important*), making them interval-dependent variables.

The use of existing data in this study had several advantages. According to Frankfort-Nachmias and Nachmias (2015), using existing data saves both time and money. In the Good to Great study (Behrstock-Sherratt et al., 2014), some of the data were already in the public domain and permission was granted to provide access to the de-identified datasets as well. No additional time or money was spent to collect the data. A methodological advantage of using secondary analysis for this study was to expand the depth and breadth of the original study (Frankfort-Nachmias & Nachmias, 2015). NNSTOY and their research partners showed an interest in the study and offered to support the use of its data based on the premise that the research would be mutually beneficial. The results of this secondary analysis add value to the original dataset.

A challenge to the use of existing data is that a researcher is unable to control their collection. For this study, I was unable to use a more complex design because there was no way to distinguish which participants had both an official and unofficial mentor within the categories of generational cohorts. Therefore, it would be impossible to determine whether each generational cohort prefers official or unofficial mentorship within a single research question. Because I could not cross the two independent variables, I had separate research questions for each condition of the mentor status.

Research Questions and Hypotheses

The research questions for the study examined official and unofficial mentorship and generational cohorts to address the problem as described in Chapter 1. Professional learning and mentorship are complex processes that are used by schools to change classroom practice with the intent of increasing student achievement (Lieberman &

Hanson, 2012; Zachary, 2012). However, based on their shared values and experiences, each generational cohort of educators may view teaching and learning from a unique perspective, thus responding differently to mentoring. Furthermore, the literature review from Chapter 2 revealed a gap in the current body of knowledge with regards to how generational cohorts of teachers viewed unofficial and official mentorship. Specifically, this research addressed a gap in the literature about STOYs and their views on mentor status. The two research questions for the study were:

RQ1: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

H_{01}: There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A1}): STOY Baby Boomers will have significantly higher perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and/or the ability to offer support as compared with Generation Xers.

RQ2: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

(H_{02}): There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A2}): STOY Generation Xers will have significantly higher perceptions of

unofficial mentors' levels of empathy, alignment of personality to the mentee,

and/or the ability to offer support as compared with Baby Boomers.

Methodology

This section of Chapter 3 contains a detailed description of the methodology that

was used in the study. The population, sampling and sampling procedures, procedures for

recruitment and participation are discussed. The data collection associated with the main

study and the procedure and permissions for gaining access to the dataset are also

presented. Furthermore, I describe the instrumentation, operationalization of constructs,

and data analysis plan. This section concludes by outlining the threats to validity and

ethical procedures to be used in the study.

Population

This study was designed to produce results that were generalizable to novice

teachers within their first five years in education. Although the STOYs who took the

survey were, on average, older and more experienced than the average teacher in the

United States (Behrstock-Sherratt et al., 2014), the STOYs perceived mentorship as a key

contributor to their professional growth during their first five years in the classroom. In

this way, they may potentially represent the broader population of beginning teachers to

whom these results generalize. The approach used by the original researchers clarifies

this assertion.

Sampling and Sampling Procedures

Because this study relied on existing data, an understanding of how they were originally collected is vitally important, especially as related to sampling. The American Institutes for Research (2014) used a convenience sample, a nonprobability sample design for the original study (Frankfort-Nachmias & Nachmias, 2015). The convenience sample approach is characterized by selecting whatever sampling units are available to the researchers. This sampling technique is both time and cost efficient (Laerd Research, 2013). Typically, the researcher would be unable to estimate if the convenience sample is characteristic of the general population and thus generalizing any findings would be difficult. However, in this case, the survey methodologists from the American Institutes for Research (2014) did compare the demographic data of the respondents to the demographic data of the STOYs in the database of the NNSTOY organization (Behrstock-Sherratt et al., 2014). They concluded that their sample included teachers from every grade level and across all core content areas. Furthermore, they had a variety of teachers who had taught at more than one school and included teaching assignments that served at-risk youth in both urban and rural settings.

Other nonprobability sampling techniques include purposive samples and quota samples (Frankfort-Nachmias & Nachmias, 2015; Laerd Research, 2013). Purposive samples are when the researcher purposely selects the sample units to appear to be representative of the population. The disadvantages of this sampling technique include researcher bias and the defense of participant selection. The Good to Great study did not select STOY participants based on other characteristics but rather attempted to increase

the response rate as high as possible within the convenience sample (Behrstock-Sherratt et al., 2014). Quota samples can also be used to select a sample that is as close as possible to the sampling population (Frankfort-Nachmias & Nachmias, 2015). In the Good to Great study (Behrstock-Sherratt et al., 2014), a quota sample would have been nearly impossible to use because the strata (or sampling groups) would overlap too much. Gender, age, classroom experience, teaching assignment, and other groups would be too much to attempt to match for quota sampling.

The American Institutes for Research (2014) also did not choose a probability sample design for the Good to Great study (Behrstock-Sherratt et al., 2014). Probability sample designs such as simple random samples, systematic samples, stratified samples, or cluster samples help the researcher randomly select sample units that are representative of a population using a probability method (Frankfort-Nachmias & Nachmias, 2015; Laerd, 2013). Although probability sample designs enable the researcher to make statistical inferences and control biases, these designs also have limitations. For instance, a complete list of the population must be available for probability sampling. In the Good to Great study, the researchers were limited to the STOYs that had e-mail access, thus limiting their population (Behrstock-Sherratt et al., 2014). Also, the database of STOYs is limited to those receiving the award since 1970 and those registered with NNSTOY. Of the 763 registered STOYs, 755 had valid e-mail addresses. Probability sampling designs would not have been a good fit with this population.

To minimize the likelihood of a statistical error, the sample should be large enough to test the research questions (Trochim, 2006). To compute the sample size to

achieve 80% power, alpha = .05, and a medium (.5) effect size; the G*Power 3 software

(Faul, Erdfelder, Lang & Buchner, 2007) was used. A post-hoc test showed that 70

participants in each group were needed to achieve the sample size goals. Therefore the

127 Gen Xers and 180 Baby Boomers in the existing dataset were expected to be

adequate, depending on how many of each group responded to the questions on

mentorship. The needed sample size was also estimated using another sample size

generator on Abraxas Energy's website (Rao, 2009). The parameters inputted were a 5%

margin of error, a 95% confidence level, and the registered STOY population size of 755.

Using this generator, the recommended sample size was 255 participants overall, which

was less than the overall sample size of 311 participants.

Procedures for Recruitment, Participation, and Data Collection

The survey methodologists from the American Institutes for Research (2014)

were responsible for administering the original Good to Great survey in the fall of 2013

(Behrstock-Sherratt et al., 2014). NNSTOY provided the methodologists with a

participant list of 763 pre-K through 12th grade teachers nationwide who had been

selected as STOYs between 1970 and 2013. The list was narrowed to 755 teachers,

eliminating those who could not be reached via e-mail. All 755 teachers received a pre-

notice of the survey and were sent a link with an anonymous log in to the online survey

(American Institutes for Research, 2014). The pre-notice included participants' rights and

the purpose of the survey. On logging in, the participants were notified that the survey

would take approximately 40 minutes and may be completed in multiple sittings using

the same log in. They were also notified that the survey deadline was November 22, 2013

and that all responses were voluntary. The introduction indicated that questions on the survey could be skipped without penalty. Four follow-up e-mails were sent to non-respondents in an attempt to increase the response rate. There were 311 completed surveys (41%), indicating an exceptionally high response rate for an online survey (American Institutes for Research, 2014).

In the fall of 2015, I contacted the executive director and CEO of the NNSTOY organization, to discuss using the Good to Great study (Behrstock-Sherratt et al., 2014) as a data source for this study. The executive director agreed that the new study could add value to the original study and facilitated a conference call with the American Institutes for Research. Through a series of conference calls and e-mails with the lead researcher, permission to use the data was granted. The complete dataset was provided once the study had been approved by Walden University's IRB (Approval No. 02-22-17-0299523).

Instrumentation and Operationalization of Constructs

The Good to Great Report (Behrstock-Sherratt et al., 2014) described the process for developing the 5-point Likert type survey instrument, including the stakeholders involved and drafting process. The core team of researchers included seven partner organizations: American Association of Colleges of Teacher Education, Center on Great Teachers and Leaders (GTL Center) at American Institutes for Research (AIR), Council for the Accreditation of Educator Preparation, Council of Chief State School Officers, National Council on Teacher Quality, National Education Association, and NNSTOY. In May 2013, the team drafted the survey and subsequently in June 2013 met with an initial

focus group including STOYs, professional teaching organizations, and educational policy makers. The draft was reviewed and feedback from the first group was used to edit the survey. A second focus group of similar stakeholders convened in July 2013 to review the new draft and provide feedback. To increase the reliability and validity of the scores, the core team revised the survey again prior to forwarding it for completion. The American Institutes for Research (2014) edited and finalized the instrument. The report noted that survey methodologists used the online survey software, Vovici 6, and that the instrument had been tested (Behrstock-Sherratt et al., 2014, p. 32).

The first independent variable in the study was generational cohorts, further defined by two groups: Baby Boomers and Gen Xers. The Good to Great study (Behrstock-Sherratt et al., 2014) collected demographic information from each participant, including age categories. Due to the use of the pre-existing age group categories from the original study, the birth years of each generational cohort were adjusted slightly to match the dataset. This decision is discussed in detail in the data coding section of Chapter 4. For the purpose of this study, participants born prior to 1962 were categorized and Baby Boomers. Participants born between 1963 and 1982 were categorized as Gen Xers. This variable was dichotomous. Based on the data available in the public domain, and using the pre-defined birth years, I was able to determine that 127 of the respondents would be Gen Xers and 180 would be Baby Boomers. The Millennial generation included only 4 participants and therefore this generational cohort was not included in the study.

The second independent variable, status of the mentor, was also dichotomous. As noted earlier, the existing dataset did not allow for the more powerful, single 2x2 design, which might show some interaction effects between the generational cohort and type of mentor. Therefore, two separate research questions were crafted and the threshold for rejecting the null adjusted accordingly.

The dependent variables selected from the Good to Great study (Behrstock-Sherratt et al., 2014) were mentors' levels of empathy, alignment of personality to the mentee, and their ability to offer support—three qualities that the mentee (STOY) attributed to increasing his or her effectiveness as an educator. Behrstock-Sherratt et al. (2014) defined the mentor's level of empathy as the level of compassion the mentor exhibits towards the mentee. The alignment of personality to the mentee was defined as how closely the mentor's interests were complimentary to the mentee's interests. Finally, the mentor's ability to offer support referred to how well the mentor was able to provide helpful advice to the mentee.

The operationalization of constructs remained consistent in the study. The participants rated the variables on a Likert-type scale of 1–5. With each prompt on the original survey, the participants indicated their opinion about the degree of importance of the statement towards effective mentorship (1 = *not at all important*, 2 = *not very important,* 3 = *neither important nor unimportant*, 4 = *somewhat important,* or 5 = *very important*.) Thus, the dependent variables were at the interval level.

Data Analysis

The research questions for the study focused on whether there was a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official and unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support. In this study, there were two independent variables, generational cohorts and mentors' status, where group differences were tested within categories of the mentors' status. The three dependent variables were the official and unofficial mentors' levels of empathy, alignment of personality to the mentee, and their ability to offer support. The causal-comparative design necessitated an analytical strategy that was appropriate for one dichotomous independent variable and three metric dependent variables (Frankfort-Nachmias & Nachmias, 2015; Trochim, 2006; Wiesner, 2006). A Hotelling's T^2 test was determined as an appropriate analysis to answer the research questions.

The Hotelling's T^2 is a multivariate extension of an independent sample t test, making it a more robust statistical analysis as compared with running multiple independent sample t tests (Wiesner, 2006). The use of a multivariate analysis also helped control for potential Type I error as compared with analyzing the dependent variables separately. More importantly, the use of a multivariate technique enabled the detection of differences in groups based on the combinations of scores on the dependent variables (Wiesner, 2006). On the contrary, an independent sample t test would only identify differences for a single dependent variable (Green & Salkind, 2014).

Prior to beginning the statistical analysis using the SPSS software (Green & Salkind, 2014), some diagnostic tests were needed. First, I ensured my data met the four assumptions of the Hotelling's T^2 test (Wiesner, 2006). The first assumption, independence, means that the participants for each population were independently sampled. The second assumption states that that there are no distinct subpopulations with different means. The procedures implemented in the original Good to Great research study (Behrstock-Sherratt et al., 2014) confirmed that the subjects were independently sampled and controlled for subpopulations. These assumptions were already met.

The third assumption of a Hotelling's T^2 test is normality of variables (Wiesner, 2006). This means that the data from both populations are normally distributed. This assumption was verified by computing skewness and kurtosis to determine whether the shape of the distributions was within the normal range. (Laerd Statistics, 2015). The final assumption, homoscedasticity, is closely related to normality. That is, if both dependent variables are normally distributed, then the outcome will be homoscedastic. I checked this assumption through using Levene's test of equality of variances. Once I reviewed the assumptions, I moved forward with the Hotelling's T^2 test.

Because I was unable to conduct a more powerful multiple variable analysis due to the structure of the dataset, I conducted two separate Hotelling's T^2 tests for the conditions of the second independent variable of mentor status. To control for possible over-interpretation of data that were analyzed twice, I adjusted the a priori alpha level (.05) by dividing it in half ($p < .025$).

To control for Type I error and test for significant differences at the univariate level, post-hoc analyses were needed. I used independent sample *t* tests with a Bonferroni correction and the a priori alpha level of .05 to identify any significant differences. In this case, three dependent variables with a corrected alpha would be significant at $p <. 008$ $(.025/3 = .008)$.

Threats to Validity

The purpose of this study was to compare Baby Boomers and Gen Xers to determine if there were differences in perceived attributes of official and unofficial mentorship based on their cohort. The research design was quantitative and causal-comparative because the study examined the relationship between variables through statistically analyzing the data gathered from a numerical instrument. Research validity, or the demonstration that the inferences and conclusions made are accurate, is a vital component of empirical research (Trochim, 2006). This section explains how I addressed internal, construct, and external validity in the study.

Internal validity refers to the causal relationship between variables in a study (Trochim, 2006). Many of the typical threats to internal validity were controlled for within the original Good to Great study (Behrstock-Sherratt et al., 2014) research design. For instance, the data were collected from each participant at a single point in time. Therefore, internal threats such as maturation between measurements, historical changes, attrition, changes in instrumentation, and the effects of subsequent testing were not applicable to this study. Another threat to internal validity is selection (Trochim, 2006). To minimize this threat, the original study sent the survey link to all of the 755 STOYs on

file with the NNSTOY organization. Participation was voluntary for all participants and, as such, each STOY had an equal opportunity to participate in the study.

External validity refers to how well the findings of the study could be generalized to other places, times, and populations (Trochim, 2006). To address external validity, the survey methodologists from the American Institutes for Research (2014) compared the demographic data of the respondents to the demographic data of all STOYs and the general population of teachers in the United States. They found that their sample included a representative group based on grades taught, content areas, regions of the country, and teaching settings. However, the STOYs who participated were older and more experienced than the average teacher in the United States (Behrstock-Sherratt et al., 2014). Although not always the case, age and teaching experience are often linked because as teachers gain more experience, they also grow older. Because the data were disaggregated by generational cohorts, the age of the participants was accounted for within the analysis, increasing the external validity of the study. There were two specific threats to external validity when attempting to generalize the study to all novice teachers. First, the original study did not collect demographic data about race, ethnicity, or level of education. Therefore, it was unclear if the population in the study was completely representative of most beginning teachers. Furthermore, although the STOYs in the study were asked to reflect on their first five years of teaching, their life experiences, including serving as a mentor, winning the STOY award, and other unique leadership opportunities could have influenced their perspectives on mentorship.

Construct validity was determined through the instrument development process used by the original Good to Great researchers (Behrstock-Sherratt et al., 2014). Described in detail in the operationalization of constructs section, the process for developing the measurement instrument was multi-faceted. A core team of seven partner organizations met to develop the original research survey. This was presented to a focus group for stakeholder feedback and then edited. Another core team met to revise the instrument prior to sending the draft to a second focus group. Based on feedback, the instrument was edited again prior to the American Institutes for Research (2014) completing the survey instrument. To minimize potential measurement error, I generated reliability estimates for a sample of respondents before the main analysis was conducted.

Statistical conclusion validity was addressed through the statistical test selected for data analysis. The Hotelling's T^2 test is a more robust test than running multiple independent sample t tests (Wiesner, 2006). Additionally, the Hotelling's T^2 test is appropriate to use with an independent variable that contains two groups, Gen Xers and Baby Boomers. As described in detail in the data analysis section, other diagnostic tests were completed to ensure that the assumptions were met for the Hotelling's T^2 test. Finally, the post hoc analyses with a Bonferroni correction helped to control for Type I error. Strong statistical conclusion validity was achieved through the combined use of the Hotelling's T^2 test, diagnostic tests, and post hoc analyses.

Ethical Procedures

In this section, I outline the ethical procedures and considerations for the study. In the original Good to Great study (Behrstock-Sherratt et al., 2014), members of the

NNSTOY organization received an e-mail notification in November of 2013, requesting their voluntary participation in the study. The pre-notice e-mail informed participants of their rights and privacy considerations. Participants had the opportunity to enroll in the study through clicking a survey link that was e-mailed on four follow-up dates. All participants were over the age of 18 and the results of the survey were anonymous. At any point during the survey, participants could choose to discontinue their participation through simply closing the browser.

Through contacting the executive director of NNSTOY in the fall of 2015, I was able to make contact with the American Institutes for Research. After numerous conference calls and e-mails, the lead researcher agreed to provide access to the dataset. Furthermore, the original study passed the Internal Review Board approval process from the American Institutes for Research. The dataset was de-identified and sent electronically after Walden University approved the study. Once received, the data were kept confidential through a secure, password-protected web-server. The people who had access to the data were my dissertation committee, the original research team, and me.

Summary

In summary, I sought to compare Baby Boomers and Gen Xers to determine if there were differences in perceived attributes of official and unofficial mentorship based on their cohort. The research design selected for this study was nonexperimental and causal-comparative. I completed a secondary data analysis using existing data from the Good to Great study (Behrstock-Sherratt et al., 2014). Thus, all participants had been recognized as STOYs. The Hotelling's T^2 test, partnered with other diagnostic tests and

post hoc analyses, were used to statistically analyze the data. Threats to validity and ethical procedures were also described in detail. The methodology described in this chapter supports the research design and provided the data needed to sufficiently answer the research questions.

In Chapter 4 of this study, I discuss data collection and the results of the research. The analysis included descriptive statistics, tests for assumptions, and the results of post hoc analyses. The chapter concludes with a summary of how the data can be used to answer the research questions.

Chapter 4: Results

For decades, the American school system has been struggling to increase student achievement (DuFour & Eaker, 1998; Gardner, 1983). Teacher mentorship as a form of professional development has been proposed as one way to improve teacher practice and student outcomes (Ingersoll & Strong, 2011; Lieberman & Hanson, 2012; Zachary, 2012). But teachers from different generations may view mentorship differently due to their generational cohort affiliation (Strauss & Howe, 1991; Zachary, 2012). This study addressed a gap in the literature by examining how a unique population of successful teacher leaders, STOYs, perceived the nature of formal and informal mentoring relationships.

The purpose of this research was to advance generational cohort theory (Strauss & Howe, 1991) and educational practice as they related specifically to the generational cohorts of Baby Boomers and Gen Xers and their views on official and unofficial mentors in their teaching careers. Relying on existing data from the Good to Great study (Behrstock-Sherratt et al., 2014), I used a nonexperimental, causal-comparative research design. The main independent variable was generational cohorts. This independent variable consisted of two groups: Baby Boomers and Gen Xers. The second variable was mentor status, also categorized into two groups: official and unofficial. Given how the dataset was constructed, however, I was unable to treat it as an independent variable in the analysis but I did incorporate these categories into my study by using two research questions. The dependent variables were the official and unofficial mentors' levels of empathy, alignment of personality to the mentee, and their ability to offer support.

Based on a review of the literature, two main research questions emerged:

RQ1: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

H_{01}: There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A1}): STOY Baby Boomers will have significantly higher perceptions of official mentors' levels of empathy, alignment of personality to the mentee, and/or the ability to offer support as compared with Generation Xers.

RQ2: Is there a significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support?

(H_{02}): There is no significant difference between STOY Baby Boomers' and STOY Generation Xers' perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and the ability to offer support.

(H_{A2}): STOY Generation Xers will have significantly higher perceptions of unofficial mentors' levels of empathy, alignment of personality to the mentee, and/or the ability to offer support as compared with Baby Boomers.

In Chapter 4 I include a review of the data collection procedures and a description of how the existing dataset was organized and transmitted. Data screening and coding are described in detail. Descriptive and demographic characteristics of the sample are also

discussed. The results section highlights statistical assumptions, the findings of the

statistical analyses, and additional statistical tests that were run based on the results of the

main analyses. Chapter 4 ends with a summary of the answers to each research question.

Data Collection

The dataset from the Good to Great study (Behrstock-Sherratt et al., 2014) was

first received on February 23, 2017. On reviewing the file with my dissertation

committee, I noticed that the researchers at the American Institutes for Research had

collapsed the age group categories as part of the process to de-identify the data. Without

age group categories, the data were insufficient to answer the research questions about

generational cohort perceptions. On March 8, 2017, I contacted the lead researcher to

request only the data from the specific items as related directly to the research variables.

Based on the new parameters, the researchers at the American Institutes for Research sent

the final dataset on March 31, 2017.

Data Screening

The dataset included 328 participants. However, due to having a birthdate after

1982, five participants were classified as Millennials and were removed from the study.

Therefore, the total number of respondents in the secondary analysis was 323. The

dataset sent to me by American Institutes for Research included both complete and

incomplete surveys, resulting in a discrepancy with the originally published sample size

($N = 311$). For my purposes, I was able to start with all respondents. Furthermore, based

on the modified definitions for each generational cohort, discussed in detail in the data

coding section below, 137 participants were categorized as Gen Xers and 186 were defined as Baby Boomers ($N = 323$).

Data Coding

One of the primary challenges in using existing data is that the dataset may not align perfectly to the research questions. For the purposes of this study, the categories of the generational cohorts were adopted to align with Strauss and Howe's (1991) generational cohort theory: Baby Boomers, born between 1943-1960, and Gen Xers, born between 1961-1981. The specific birth years for each generational cohort were disputed heavily in the literature (Edge, 2014; Gardiner et al., 2013; Holyoke & Larson, 2009; Houck, 2011). In the Good to Great study (Behrstock-Sherratt et al., 2014), there was one demographic question that asked participants to select their age group category rather than state their exact age. The pre-selected age ranges were: under 25 years, 25-30 years, 31-35 years, 36-40 years, 41-45 years, 46-50 years, 51-55 years, 56-60 years, and over 60 years old. Based on the year of the original survey, I was able to determine that participants who selected age group 31-35 through age group 46-50 would have been born between 1963-1982. These groups aligned most closely to Strauss and Howe's (1991) definition of Gen Xers, born between 1961-1981. To select the age groups for the Baby Boomers, and in consultation with my supervisory committee, I made the decision to use the participants who marked the age group categories of 51-55, 56-60, and over 60. This group included all participants with birth years prior to 1962. The Strauss and Howe (1991) definition for Baby Boomers is 1943-1960. Although some participants in the over-60 age range may have been born prior to 1943, this possibility is unlikely due to

the fact that they would have been over 70 years old and still teaching at the time of the survey. This slight modification was not seen as a limit to the study, however.

The dependent variables selected from the Good to Great study (Behrstock-Sherratt et al., 2014) were mentors' levels of empathy, alignment of personality to the mentee, and their ability to offer support. With each question on the original survey, the participants indicated their perceptions about the degree of importance of the statement towards effective mentorship using a Likert-type scale of 1-5 (1 = *not at all important,* 2 = *not very important*, 3 = *neither important nor unimportant*, 4 = *somewhat important*, or 5 = *very important*.) Thus, the dependent variables were used as originally scored.

Although 323 participants were coded into cohorts, not all respondents responded to the six items that were used in my research. The original study allowed participants to skip survey questions that did not apply to them. Therefore, the cohorts for my study were smaller than the recommended 70 participants per group from my a priori analysis (actual power estimates are reported in Table 2). As discussed in Chapter 3, however, a non-probability sample design was used in the original study and with the exception of age, the population was representative of American teachers with regards to regions of the United States, grade levels, content areas, and teaching settings.

The analyses of missing data in the overall dataset showed that 45 of the 137 Gen X participants and 22 of the 186 Baby Boomer participants indicated that they had an official mentor and completed these three related questions in the survey. The response rate to the three related questions about unofficial mentorship was higher, with 58 Gen X

respondents and 62 Baby Boomers participating. If teachers did not answer all three questions in a mentoring category, their responses were not used in the main analyses.

Results

The results section includes a detailed review of the descriptive statistics that appropriately characterize the sample. The assumptions for the Hotelling's T^2 are evaluated. The results to the main statistical analyses are revealed, along with the results of the post hoc analysis. The section concludes by answering the research questions.

Descriptive Statistics

Table 1 highlights the descriptive statistics used to evaluate the dependent variables. Generally, fewer participants responded to questions about official mentorship as compared to unofficial mentorship. The means for each variable had a small range from 4.16 to 4.90, indicating that most participants ranked all of the dependent variables as important factors in mentoring relationships.

Table 1

Descriptive Statistics Used to Evaluate the Dependent Variables

Variable	n	M	SD	Skewness[a]	Kurtosis[b]	Levene's p
Official Empathy	92	4.72	.50	-1.51	1.38	.49
Official Personality alignment	75	4.16	.70	-0.47	.07	.43
Official Support/Advice	97	4.88	.33	-2.32	3.46	.91
Unofficial Empathy	147	4.77	.44	-1.53	1.03	.04
Unofficial Personality Alignment	128	4.37	.74	-1.30	2.66	.91
Unofficial Support/Advice	150	4.90	.30	-2.69	5.33	.91

Note. M = mean, SD = standard deviation, [a] standard error = .17, [b] standard error = .33

Evaluation of Assumptions for the Hotelling's T^2

Four main assumptions must be met to use the Hotelling's T^2 for a statistical

analysis (Frankfort-Nachmias & Nachmias, 2015; Trochim, 2006; Wiesner, 2006). The

first two assumptions were already met prior to this analysis, based on the procedures

outlined in the original Good to Great research study (Behrstock-Sherratt et al., 2014).

Independence was achieved when participants for each population were independently

sampled. All STOYs with a valid e-mail address received equal access to the survey

through a unique participant log in. The second assumption, no distinct subpopulations

with different means, was also controlled for within the research design. No

subpopulations were evident in the data. Based on the design of the Good to Great

research study (Behrstock-Sherratt et al., 2014), the subjects were independently sampled

and controlled for subpopulations.

The third assumption of a Hotelling's T^2 test is normality of variables (Wiesner,

2006). To verify this assumption, I computed the values for skewness and kurtosis.

Values less than 2 or greater than -2 are considered within the normal range (Laerd

Statistics, 2015). The values for skewness and kurtosis for all dependent variables were

noted in Table 1. For the dependent variables of official support/advice and unofficial

support/advice, the values of both skewness and kurtosis were considered outside of the

normal range. Additionally, the kurtosis value for unofficial personality alignment was

high, at 2.66. However, the Hotelling's T^2 is not generally sensitive to violations of the

assumption of normality (Wiesner, 2006).

Homoscedasticity was assessed with a Levene's test, which assesses whether the population variances of the groups are equal. Thus, a significant result ($p < .05$) indicates a violation of the assumption of homoscedasticity (Green & Salkind, 2014). The results of the Levene's test were reported in Table 1. One dependent variable, unofficial empathy, showed significance ($p = .04$). The other five dependent variables did not show significance. Because the Hotelling's T^2 is a robust test and can handle outliers, a decision was made to move forward with all six dependent variables in the main analyses.

Inferential Statistics

The first analysis with Hotelling's T^2 indicated that there was not a statistically significant difference between the two generational cohorts when examining their perceptions of official mentorship, $T^2 = 7.80$, $F(3, 63) = 2.52$, $p = .07$. Likewise, the Hotelling's T^2 used to examine perceptions of unofficial mentorship indicated that there was not a significant difference between the two generational cohorts, $T^2 = 4.43$, $F(3, 116) = 1.45$, $p = .23$. In both instances, I was unable to reject the null hypotheses as originally proposed.

In multivariate analysis, confounding variables can sometimes mask meaningful effects. Although the Hotelling's T^2 is robust, it is not completely non-sensitive to violations of its assumptions. Because a few dependent variables in this study were slightly skewed and/or kurtotic, I decided to review the between subjects effects for the six dependent variables. Only one variable, official personality alignment, was seen as noteworthy ($p = .01$) and worth discussion in Chapter 5.

When ran as a simple univariate test, which included the 10 individuals who only responded to this item, the results indicated that there was a statistically significant difference in mean scores for official personality alignment between Baby Boomers and Gen Xers, $t(73)= 2.95$, $p = .01$. The mean for Gen Xers (4.00) was significantly lower than the mean for Baby Boomers (4.48).

Table 2

Tests of Between Subjects Effects

Variable	Gen X n	Baby Boomers n	p	Partial η^2
Official Empathy	45	22	.97	.00
Official Personality alignment	45	22	.01	.10
Official Support/Advice	45	22	.56	.00
Unofficial Empathy	58	62	.11	.03
Unofficial Personality Alignment	58	62	.30	.00
Unofficial Support/Advice	58	62	.18	.00

Summary

The purpose of this quantitative, casual-comparative study was to examine how different generations of STOYS perceived official and unofficial mentoring relationships. The goal of the study was to determine if there was a significant difference in how Baby Boomers and Generation Xers perceived official and unofficial mentors' levels of empathy, alignment of personality to the mentee, or their ability to offer support. Hotelling's T^2 tests indicated that Baby Boomers and Gen Xers did not show a significant difference in their perceptions of official nor unofficial mentoring factors. However, a

post hoc analysis indicated that Baby Boomers had a significantly higher ($p = .01$)

perception of official mentors' personality alignment to the mentee. This result led me to

accept the alternative hypothesis for the first research question. Since the tests of between

subjects effects showed that there were no other significant dependent variables, I

accepted the null hypothesis for the second research question.

Chapter 5 of this dissertation summarizes and interprets the main findings from

the study. The limitations of the study and recommendations for future research are also

presented. The chapter concludes by highlighting the implications for positive social

change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to advance generational cohort theory and educational practice by examining how different generations perceived official and unofficial mentorship. Specifically, Baby Boomers and Gen Xers were compared to determine whether there were differences in how they perceived their mentors' levels of empathy, alignment of personality to the mentee, and ability to offer support. The nature of this study was a secondary quantitative analysis of data collected from the Good to Great study (Behrstock-Sherratt et al., 2014). To address the research questions, the study was nonexperimental and causal-comparative. The results contribute to the body of knowledge about professional learning in education by offering a generational perspective on formal and informal mentorship. This study could inform school districts and other organizations that are looking towards mentorship as a way to build their organizational capacity.

The key findings of the study were noteworthy but unexpected. Based on the initial Hotelling's T^2 analyses, there were no significant differences found between Baby Boomers' and Gen Xers' perceptions of official nor unofficial mentorship. However, the post hoc analysis indicated that Baby Boomers showed a significantly higher perception of the importance of an official mentor's alignment of the personality with the mentee when compared with Gen Xers. Across both generational cohorts, the means for each variable had a small range (4.16 to 4.90) for formal and informal mentoring relationships. This finding indicated that most participants ranked all of the dependent variables as important factors in mentoring relationships.

In Chapter 5 I interpret the main findings from the study in the context of the literature and the theoretical foundations. The limitations of the study are also presented. Chapter 5 includes recommendations for future research based on the study's strengths, limitations, and the literature. The chapter concludes by discussing its implications for positive social change.

Interpretation of the Findings

The findings in this study served to confirm and extend both the literature within the field of educational mentorship and Zachary's (2012) mentoring theory. One of its main findings was told in the descriptive data. For both generational cohorts, the means for each variable ranged from 4.16 to 4.90 (with 5 being high) for both formal and informal mentoring relationships. Most participants ranked all of the dependent variables as important mentoring factors. Numerous researchers concurred that the mentor's level of empathy, alignment of personality to the mentee, and ability to offer support, contributed to the effectiveness of the mentoring relationship (Efron et al. 2012; Israel et al., 2014; Linder, 2011; Pogodzinski, 2012; Wasburn et al., 2012). For instance, studies showed that when a mentor's personality was aligned with the mentee, the mentee was more likely to interact with the mentor and less likely to encounter obstacles (Eriksson, 2013; Pogodzinski, 2012). The literature also indicated that effective mentors offered professional support and advice to their mentees (Linder, 2011; Meixia & Carlson, 2013; Polly & Hannafin, 2011; Vale et al., 2010).

The high ranking of the level of importance of the dependent variables also extended Zachary's (2012) mentoring theory. Zachary noted that effective mentors

support learning through maintaining a positive relationship and listening to the mentee's needs. Zachary (2012) also suggested that mentors facilitate growth by engaging in discussions to offer support and advice, setting tasks, and evaluating outcomes collaboratively. The participants in this study indicated that support, advice, empathy, and personality alignment were all essential factors in their mentoring relationships.

The other noteworthy finding of the study was that Baby Boomers had a significantly higher ($p = .01$) perception of official mentors' personality alignment to the mentee. This finding confirmed Strauss and Howe's (1991) generational cohort theory. Strauss and Howe proposed that Baby Boomers are passionate about professional autonomy and independence, preferring to work alone. Gen Xers, on the contrary, are flexible and more willing to collaborate, understanding the value of team teaching and planning. Given these personality traits, when an independent Baby Boomer is assigned an official mentor, it would be imperative that the personality of the mentor and mentee align. However, a Gen Xer, with a more flexible and collaborative nature, may find personality alignment between the official mentor and mentee less important. Teamwork with any personality type might be more accepted by Gen Xers than Baby Boomers.

Limitations of the Study

Due to the nature of the study and the use of existing data, there were several unavoidable limitations. First, the Good to Great study (Behrstock-Sherratt et al., 2014) used a convenience sample. The researchers collected demographics to compare the sample population to the general population of teachers in the United States and found that the respondents were a representative group based on grades taught, content areas,

regions of the country, and teaching settings. However, there was no demographic information collected about race, gender, and level of education. Because a convenience sample is a non-probability sampling design, the results should be interpreted with caution.

Another limitation of the study related to sampling was the sample size of each group of the generational cohorts. Prior to receiving the dataset, I was unable to determine how many Gen Xers and Baby Boomers had answered the questions about unofficial and official mentorship. Due to missing data, the group sizes for both official and unofficial mentorship were less than the ideal of 70 participants as calculated by the G*Power 3 software (Faul et al., 2007). A larger sample would have given a larger effect size and increased the validity of the study.

An additional challenge of this study was the highly positive nature of the participants' views of their mentors. The response distributions were clustered toward the upper end of scale, making it difficult to identify differences. With the first analysis of formal mentors, it is possible that a larger sample might have produced significant results. Closer inspection of the between group effects for each of the six dependent variables indicated a significant difference for one construct, which seemed amenable to interpretation.

One compromise in the study was the inability for me to use a more complex research design to cross the independent variables in the same analysis. While potentially a limitation to this study, doing so would have assumed that teachers in both generations had experienced both types of mentoring relationships. Of the 323 people in the dataset,

only 35 answered the survey items related to the six dependent variables, which was not enough to conduct that type of multivariate analysis.

The final limitation of the study was the specific population of teachers being sampled, STOYs. This constraint presented a threat to external validity and generalizability of this research study to all teachers. Even though the participants in the study were asked to reflect on their first five years as a novice teacher, prior to winning the award, their life experiences could have influenced their perspectives on mentorship. Leadership opportunities resulting from the STOY award such as serving as a mentor, offering professional development to colleagues, and receiving scholarships for continued education might change how they perceive both unofficial and official mentorship. It is possible that STOYs are systematically different than the general population of teachers because of the unique opportunities afforded to them from the Teacher of the Year program. This should be considered when generalizing the results to other populations of teachers.

Recommendations

This dissertation research examined how different generations of STOYs perceived specific attributes of official and unofficial mentors. Due to the use of existing data, there were several unrealized opportunities for additional research about STOYs and mentorship. Within the dataset, only 35 respondents answered all the questions on official and unofficial mentorship. Therefore, the sample was too small to determine whether each generational cohort preferred official or unofficial mentorship. Future research might include a comparison of generational cohorts who had both types of

mentors. Furthermore, the dataset used for this research study included only five participants born prior to 1982 and characterized as Millennials. Millennials have been a source of much debate in the last decade and are known for their favorable response to mentorship (Howe & Strauss, 2008). A study that compares Millennials to other generational cohorts could provide meaningful data about how to engage Millennials in the workforce.

Additionally, as a result of their STOY award, many STOYS become mentors later in their careers. A future study that examines how becoming a mentor changes one's perspective on being mentored would contribute to the body of knowledge within the field. Also, based on the limitations of generalizing the study to other populations of teachers, I would recommend that future research include the administration of a similar survey to a more generalized population of teachers.

The literature review revealed a variety of research needs. First, numerous researchers recommended organizational mentorship training for all teachers who engage in informal mentoring (Desimone et al., 2014; Pogodzinski, 2012; Wasburn et al., 2012). A study that examines the impact of organizational mentorship training would contribute to the educational field. Also, as new technologies are interjected into the work environment, additional research is warranted to discover how each generation responds to various forms of technology use in mentoring (Edge, 2014; Gómez and Arias, 2015; Houck, 2011, Merriweather & Morgan, 2013). Numerous studies have been designed as program evaluations with a small scope of participants (Efron et al., 2012; Eriksson, 2013; Howe & Jacobs, 2013; Israel et al., 2014; Lee et al., 2014; Preston et al., 2014;

Sayler et al., 2013; Thomas et al., 2015). Future research in the field of educational

mentorship might include a broader scope of participants. Also, the literature on

mentorship focused on teacher induction (Desimone et al., 2014; Ingersoll & Strong,

2011; Israel et al., 2014; Pogodzinski, 2012). Mentoring occurs throughout a teacher's

career. Additional research about later career mentoring might also provide useful

insights to the field of education.

Implications

The results of this research have implications for positive social change on several

levels. On an individual level, mentors and mentees across career fields might refer to

this study to build more satisfying mentoring relationships. On an organizational level, by

using generation cohort typology to better align assigned mentors and mentees, school

districts could more effectively support the mentor–mentee relationship. In turn, more

effective mentorship could lead to higher quality professional performance in the field of

business. In the field of education, this professional learning could lead to improved

student outcomes. On the societal level, as K-12 schools, districts, and states take

advantage of the expertise of teacher leaders, they can support a more capable and

diverse workforce (Bosso, 2014).

In summary, this study provides some guidance for schools implementing official

mentorship programs. Although every generation noted the importance of a personality

alignment between mentor and mentee, this factor is most important to Baby Boomers.

Since Baby Boomers are the veteran teachers in the schools, and also the most

independent, ensuring a good match between the mentor and mentee is vital to the success of the mentoring relationship.

Conclusion

Although previous studies have examined mentorship and generations (Edge, 2014; Gardiner, 2013; Gómez and Arias, 2015; Houck, 2011, Merriweather & Morgan, 2013; Weis & Lang, 2012; Zachary, 2012), this is the first study that provided data about the understudied population of STOYs, offering a unique perspective on how different generations of successful teacher leaders perceived the nature of official and unofficial mentoring relationships. This dissertation research also used a broader scope of participants (STOYs from across the United States) rather than reviewing a specific mentoring program. Focusing on the generational cohorts of Baby Boomers and Gen Xers, the results indicated that the Baby Boomers had a significantly higher perception of their official mentors' personality alignment to the mentee as compared with Gen Xers.

The results of the study are important because, as school districts strive to increase student achievement, formal and informal mentors are playing a part in improving the professional practice of their colleagues. With a multi-generational workforce, it is vital that administrators and policy makers understand how different generations respond differently to mentoring. Hopefully, the results of this research can be used to educate upper level management and school administrators about the importance of intentionally matching mentors and mentees by personality types. I am confident that this dissertation research provides a strong foundation for future research in the areas of mentorship and generational cohorts.

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