

Fall 10-15-2019

## Understanding Multigenerational Nurse-Faculty-Collaboration Strategies-A Delphi Study

Heather M. Fowler

Follow this and additional works at: [https://scholarworks.uttyler.edu/nursing\\_grad](https://scholarworks.uttyler.edu/nursing_grad)



Part of the [Nursing Commons](#)

---

### Recommended Citation

Fowler, Heather M., "Understanding Multigenerational Nurse-Faculty-Collaboration Strategies-A Delphi Study" (2019). *Nursing Theses and Dissertations*. Paper 109.

<http://hdl.handle.net/10950/2313>

This Dissertation is brought to you for free and open access by the Nursing at Scholar Works at UT Tyler. It has been accepted for inclusion in Nursing Theses and Dissertations by an authorized administrator of Scholar Works at UT Tyler. For more information, please contact [tgullings@uttyler.edu](mailto:tgullings@uttyler.edu).

UNDERSTANDING MULTIGENERATIONAL NURSE-FACULTY-  
COLLABORATION STRATEGIES: A DELPHI STUDY

by

HEATHER MORRIS FOWLER MSN, RN

A dissertation submitted in partial fulfillment  
of requirement for the degree of  
Doctor of Philosophy  
School of Nursing

The University of Texas at Tyler  
October 2019

**The University of Texas at Tyler  
Tyler, Texas**

**This is to certify that the Doctoral Dissertation of**

**HEATHER MORRIS FOWLER**

**has been approved for the dissertation requirement on OCTOBER 14, 2019**

**for the NURSING PH.D. DEGREE**

**Approvals:**

DocuSigned by:

*Danita Alfred*

**Dissertation Chair: Danita Alfred**

DocuSigned by:

*Belinda Deal*

**Member: Belinda Deal**

DocuSigned by:

*Staci Zolkoski*

**Member: Staci Zolkoski**

DocuSigned by:

*Barbara Haas*

**Chair, Department of Nursing**

DocuSigned by:

*Yong Tai Wang*

**Dean, College of Nursing and Health Sciences**

©Copyright by Heather Morris Fowler 2019  
All rights reserved

## Acknowledgements

First and foremost, I want to acknowledge the grace, forgiveness, and strength provided to me throughout my life and especially throughout this journey to my Heavenly Father and Savior Jesus Christ. For it is by grace have you been saved, through faith and this is not from yourselves, it is the gift of God—Ephesians 2:8

To Dr. Danita Alfred, my dissertation chair, you were an answer to a prayer that I had, and what a blessing you have been to me through this pilgrimage! You kept me from running away from the one thing I needed to do ... finish this trek. Thank you so much for having the patience I needed, the guidance I desired, and the empathy to stay compassionate and kind, when I was enduring my passage. Thank you for sending those emails and texts and keeping me focused when I didn't ever think I would see the end. You will forever hold such a special place in my heart.

To Dr. Lynn Wieck, you are amazing! Thank you for believing in me even when I couldn't believe in myself. Thank you for always being just a phone call or email away, always making me feel like I was special, and encouraging me to feel like I have something worthwhile to share with the world. I am so lucky to have met you, and to call you my friend, teacher, and mentor.

Thank you to my wonderful committee members, Dr. Belinda Deal and Dr. Staci Zolkoski. I appreciate all the feedback and selfless dedication you gave me to make my

dissertation fabulous! I am so lucky to have been given such a caring and understanding group of women to guide me through.

I would like to extend a special thank you to my work peeps who provided me with positive encouragement throughout this journey; you knew I would be Dr. Fowler even before I knew it. To my friend Cristina, I couldn't imagine going through a PhD program with anyone else but you. I am so lucky we made it through, and you kept pushing me, even when I didn't want to be pushed. Thank you, Patty, Mary, and Cristina, for having that "come to Jesus talk" at our little hangout restaurant, because if it wasn't for that day, I may have quit right where I was. Thank you, thank you, thank you for being willing to sacrifice yourselves so I would be successful in finishing this dissertation.

To my wonderful family, I can't possibly express my love and gratitude for you all. Thank you for displaying unconditional love and devotion to me my entire life, and encouraging me to push through. You have taught me what it means to overcome obstacles, and how to endure difficulties by leaning on God. I want you to know I am who I am today because of you.

To my amazing Wonderboy Joshua: I have learned so much from you. You taught me how to fight even when I felt like I had nothing left. You have overcome adversity and obstacles that I could never imagine triumphing over. You inspire me every day to be a better mother, better friend, and overall better person. Thank you so much for cheering for me and calling me a "beast" just when I needed to hear that! I hope I inspire you to never give up, even when things are so hard. Thank you for believing in me. I love you so much!!

To my red-headed firecracker Zachary: I have been in school nearly your entire life. You are the most loving and affectionate little guy I have ever known. I can always count on you to come and give me those hugs and kisses just when I need them. Thank you for playing quietly, giving up your evenings and weekends of playtime, and your time with mommy during my dissertation adventure. Thank you for making me laugh and making my heart sing just because you were in the room. You are so smart, so spunky, and you light up my life. You healed a part of my heart I thought could never be healed. I love you so much!!

To my handsome honey bunny and soulmate Jake: I've been thinking about what I would say to you at the end of this experience for the last five years, and all I can say now is, thank you for loving me like you do. You supported me, held me up, cried with me, laughed until our stomachs hurt, and went so far above and beyond what I dreamed of, that I will spend my lifetime telling you what you mean to me. I could NEVER have done this without you. Thank you for giving up so much and sacrificing yourself more than was ever asked. You anticipated my needs and filled the gaps even when I didn't ask you to. I hope I have made you proud. I will love you today, tomorrow, and forever!! I just love you more.....

Finally, thank you to all those who participated in my study. Your contribution of your time filling out my surveys allowed me to reach my goal. I can only hope your input and insight into the literature will help expand the understanding of multigenerational collaboration.

## Table of Contents

List of Tables .....	iv
List of Figures .....	v
Abstract .....	vi
Chapter One Introduction .....	1
Purpose Statement .....	2
Background and Significance.....	2
Theoretical Framework .....	6
Research Questions .....	7
Definition of Terms .....	8
Summary of the Chapter .....	8
Chapter Two Review of the Literature .....	10
Communication .....	12
Feedback .....	12
Preferences .....	13
Recommendations .....	13
Work Style.....	14
Perceptions .....	14
Description of Workers .....	14
Mentoring.....	15
Technological Impact.....	16
Recommendations .....	16
Ethics .....	16
Loyalty .....	17
Skepticism.....	18
Motivation .....	18
Extrinsic/Intrinsic Rewards.....	18
Recommendations .....	19
Summary .....	19
Chapter Three Methods.....	21
Purpose .....	21



Research Questions .....	21
Design.....	22
Procedures/Methods .....	23
Sample.....	23
Inclusion and Exclusion .....	25
Protection of Human Subjects .....	27
Instruments/Measures.....	28
Data Collection.....	29
Round 1 .....	29
Round 2.....	29
Data Management .....	29
Statistical-Analysis Plan.....	30
Procedures to Enhance Control or Rigor.....	31
Summary .....	31
Chapter Four Results.....	33
Research Participants .....	33
Round 1 Factor Identification .....	37
Round 2 Factor Validation .....	54
Positive Collaboration.....	54
Conflict and Negative Influences.....	56
Teamwork Collaboration .....	58
Top 3 Factors .....	60
Top 3 Positive-Collaboration Strategies .....	61
Top 3 Conflict/Negative Influences for Collaboration .....	63
Top 3 Teamwork-Collaboration Strategies .....	65
Summary .....	68
Chapter 5 Discussion and Summary .....	69
Theoretical-Model Summary .....	69
Positive Collaboration Strategies .....	71
Conflict and Negative Influences .....	73
Teamwork Collaboration.....	75
Technology Summary .....	76
Strengths and Limitations.....	77
Implications .....	79
Recommendations .....	81
Conclusions .....	82
References.....	84
Appendix A: Theoretical Framework: Delphi Technique .....	95
Appendix B: Initial Letter to Program Coordinator/Dean .....	96
Appendix C: Initial Participant Invitation—Round 1 .....	98

Appendix D: Demographic and Round 1 Survey/Questions .....	99
Appendix E: Participant Instructions—Round 2 .....	102
Appendix F: Reminder E-mail for Millennial Panelist.....	103
Appendix G. Institutional Review Board Approval—University of Texas at Tyler .....	104
Appendix H. Institutional Review Board Approval—Tyler Junior College .....	106
Appendix I. Round 2 Survey .....	107
Biographical Sketch .....	115

## List of Tables

Table 1 Demographics Profile .....	36
Table 2 Example of Phase 1 Content-Analysis Process .....	39
Table 3 Positive Influence Factors.....	40
Table 4 Negative Influence Factors .....	43
Table 5 Biggest Sources of Conflict Factors .....	46
Table 6 Combination of Negative Influences and Biggest Sources of Conflict.....	48
Table 7 Factors Help With Teamwork With Older Faculty .....	49
Table 8 Factors Help With Teamwork With Younger Faculty.....	50
Table 9 Combination of Factors Helping With Teamwork for Older and Younger Faculty.....	53
Table 10 Positive Collaboration Strategies.....	56
Table 11 Conflict and Negative Influences That Affect Collaboration .....	58
Table 12 Teamwork Collaboration .....	60
Table 13 Top Three Positive Collaboration Strategies .....	63
Table 14 Top Three Conflict/Negative Influences for Collaboration.....	65
Table 15 Top Three Teamwork Strategies.....	67

## List of Figures

Figure 1. Repeating patterns of generational archetypes. ....	6
---	---

## Abstract

### UNDERSTANDING MULTIGENERATIONAL NURSE-FACULTY- COLLABORATION STRATEGIES: A DELPHI STUDY

Heather Morris Fowler

Dissertation Chair: Danita Alfred, Ph.D., RN

The University of Texas at Tyler  
October 2019

Four distinct generations have come together to work cooperatively, producing higher quality nursing students who are engaged and satisfied in their learning experience from nursing faculty. The multigenerational nursing faculty workforce must learn to work together through positive collaboration, using teamwork strategies, and decreasing conflict and negative influences in the workplace. Strauss and Howe's (1991) generational-cycle model depicted four archetypes that recur throughout history every 22 years; the life stages of generations provided the foundation for this study. Generations can come together if they understand what various generational cohorts perceive as positive collaboration factors, teamwork strategies, and negative influences. A 2-round modified Delphi research technique was used for this study. Thirty percent of the schools of nursing in Texas received an invitation to participate. A total of 84 nurses participated in Round 1, and 59 nurses participated in Round 2. Data collection occurred between

April 2018 and March 2019. Qualitative information including a 5-question survey in Round 1. Data from Round 1 was the basis for a quantitative Round 2 survey comprised of a Likert-type scale and a drag-and-drop Top-3 analysis.

**Analysis:** Descriptive statistics and conventional content-analysis techniques were employed for data analysis. Implementation of a research study using an online modified Delphi method exposed the challenges and consensus among nursing faculty and revealed successful collaboration strategies that are pertinent to working in a multigenerational workforce.

Keywords: generations, Baby Boomers, Generation X, Millennials, nurse, faculty, collaboration, conflict, negative influences, teamwork, multigenerational

## Chapter One

### Introduction

Influences that shape generations include family, spiritual beliefs, ethnic backgrounds, life events, and circumstances surrounding a person in society. Shared experiences link similarities among generational cohorts, binding individuals together by similar life lessons, habits, memories, language choices, belief systems, and overall expectations. These experiences impact people's ways of thinking and viewpoints (Foley, 2011).

In turn, generational differences among faculty in nursing education pose challenges for educators as they work to meet the diverse needs of individual students (Barry, 2014). Faculty diversity can bring new ideas, excitement, and perspective. However, without tolerance of each other, individualized characteristics, perceptions, and innovations cease to flourish. Although some types of conflict and friction can lead to solutions to problems, friction can also create new complications. Multigenerational work conflict can affect faculty in nursing education.

One element of the Florence Nightingale Pledge nurse's pledge is to "do all in one's power to maintain and elevate the standard of the profession" (1985, p. 18). The responsibility of a nurse is to patients and the entire healthcare community. Nurse educators have the responsibility to equip a new generation of nurses with skills in the workplace and prepare them to successfully enter the workforce.

## **Purpose Statement**

Producing higher quality nursing students who are engaged and satisfied with their learning experience will generate higher functioning nurses entering the workforce who will positively impact the healthcare system (Fang & Kesten, 2017). To achieve this goal, the workforce must learn to work together, through recognition and tolerance of generational differences and inherent diversity (Moore, Everly, & Bauer, 2016). The ultimate purpose of this study was to discover the strategies that help multigenerational faculty work together to prepare the next generation of nurses.

## **Background and Significance**

For the first time in modern history, four distinct generations have come together to work cooperatively in the workforce (McCarthy, 2016). In addition, nursing faculty can find themselves working in a facility with more than a 50-year age span among faculty members (Berk, 2013). Significant differences arise among the generations in life experiences, expectations, and technological expertise (Worley, 2011).

Generational cohorts, grouped according to their birth years, share life events, technological advancements, and economic conditions (Smith & Nichols, 2015). Generational events “create the personalities; values, and beliefs of a given generation, and blending the unique perspectives of these generations in the workforce can be perplexing at best” (Moore et al., 2016, p. 2). “Today’s workforce consists of individuals from four generations: The Silent Generation (born 1925-1945), the Baby Boomers (born 1946-1964), Generation X (born 1965-1981), and Generation Y, also known as Gen Me, the Net Generation, or Millennials (born 1982-1999)” (Twenge, Campbell, Hoffman, &



Lance, 2010, p. 1118). Although generational groups have no definitive beginning and ending date, the cohorts typically span 15 to 20 years (Sherman, 2006).

The Silent Generation (The Veterans), grew up during World War II and the Great Depression and experienced political and economic uncertainty, which in turn developed this generation into cautious, financially responsible, fiscally conservative, and hardworking individuals (Sherman, 2006). This generation of nurses continued to work past retirement age at all levels of nursing organizations, including education. “They tend to be respectful of authority, supportive of hierarchy, and disciplined in their work habits” (Sherman, 2006, p. 2). Members of this generation are currently between 73 and 93 years old and comprise only 3% of the entire global workforce (Bennett, 2017). Although some nursing educators in this generation still practice, acquiring a sufficient sample representative of the group would be difficult to achieve.

Baby Boomers were born in the post-World War II economic boom era., and the most noticeable difference between them and the silent generation was the introduction of television, providing an era for visual and dramatic world-changing events (Weston, 2006). “Baby boomers are known for their strong work ethic, and work has been a defining part of both their self-worth and their evaluation of others” (Sherman, 2006, p. 2). Their parents, schools, and society doted on them and they grew up in two-parent households where their fathers worked and their mothers were the caretakers (Weston, 2006).

Members of Generation X were born into a rapidly changing society that affected their education and development (Corbo, 1997). As divorce rates significantly increased among the parents of this generation, many individuals were raised in single-parent

households or found themselves as the first generation in which both parents were likely working outside the home (Sherman, 2006). Core values shifted in this group, with the beginning of a global-thinking process, technological literacy, having fun, travel, independence, and diversity (Stanley, 2010). Another difference from their preceding cohorts is the belief that work should be fun and not too serious or formal (Irvine, 2010).

Millennials (The Net Generation, Generation Y) represents approximately 81 million people who are entering the workforce and educational systems in record numbers (Barutcu & Ergin, 2017; Walker et al., 2006). “Millennials are more racially diverse and tolerant than previous generations and serve as the voice of tolerance in deliberations” (Keene & Hendrich, 2010, p. 43). “They were raised in a time where violence, terrorism, and drugs became reality of life, and by parents who nurtured and structured their lives, making them drawn to family for safety and security” (Sherman, 2006, p. 3). Millennials are the most comfortable in the digital world, as they have been surrounded with and grown up in a digital-literacy environment (Skiba & Barton, 2006).

The American Association of Colleges of Nursing Factsheet (2019) stated, “Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, U.S. nursing schools turned away more than 75,000 qualified applicants from baccalaureate and graduate nursing programs in 2018 citing insufficient number of faculty as one of the causes” (p. 2). In addition, the national nurse-faculty vacancy rate is 7.9% (Li, Kennedy, & Fang, 2019). Beginning in 2010, Baby Boomers became eligible to retire, and nurse educators projected nursing shortages throughout the country (Krail, 2005). The nurse-faculty shortage is expected to increase and intensify as the existing workforce comprises faculty over the age of 60. That number has increased to 16% of all nursing educators,

with over 76% of full-time faculty over the age of 45 (National Advisory Council on Nurse Education and Practice [NACNEP], 2010). Of full-time registered nurses (RNs), 37% are over the age of 50 (Sofer, 2018). One third of the current nursing faculty workforce in baccalaureate and graduate nursing programs is expected to retire by 2025 (Fang & Kesten, 2017).

The United States has been experiencing a significant shortage of nurses over the past several years, and the deficit is expected to rise as the need for nurses increases (Fang & Bednash, 2014). To address this shortage, deficits in the number of nursing educators is a factor that should be examined. Although no single explanation exists for the faculty shortage, researchers have identified a few key factors at the root of the problem (NACNEP, 2010). Recruitment is a critical factor in the nursing-faculty shortage because of, “difficulties in attracting and retaining qualified nurse faculty” (NACNEP, 2010, p. 1). “The faculty shortage is consistently reported as a leading barrier to enrollment growth in nursing programs” (Fang & Bednash, 2014, p. 164).

Extant literature focuses on generational differences in student preferences for teaching methods (Walker et al., 2006). Researchers consistently demonstrated the different ways members of various generations learn, their preferred teaching methods, and how educators engage individuals in their environments of study. In addition, several researchers described differences in dimensions of work ethic between generations and described techniques to bridge the gap to provide an environment of multigenerational collaboration.

However, it is unknown if current nursing faculty are implementing any of the recommended techniques when interacting and engaging each other in the workplace

(Harding, 2011). It is unknown if nursing faculty are applying evidence-based generational-collaboration strategies to work cooperatively with one another in the workplace. Organizations that understand multigenerational differences among their workforces will function more effectively (Barutcu & Ergin, 2017).

### Theoretical Framework

The generational-cycle model depicts four archetypes—Hero, Artist, Prophet, and Nomad—that occur approximately every 22 years, or the life stage of a generation (Strauss & Howe, 1991). Strauss and Howe (1991) called these changes in archetypes *turnings*, marked by a historical mood or season. Turnings rotate in the same order and a full cycle of turning lasts 80–90 years, known as a *seculum*. Each generation represents a particular archetype and archetypes repeat sequentially in a rhythm with a specific turn of crisis and awakenings. Historical events shape each generation and generations shape historical events. Strauss and Howe examined 500 years of history to find recurrent themes in the personality of each generation and discovered that repeating patterns of generational archetypes existed throughout history (Strauss & Howe, 1991; see Figure 1).

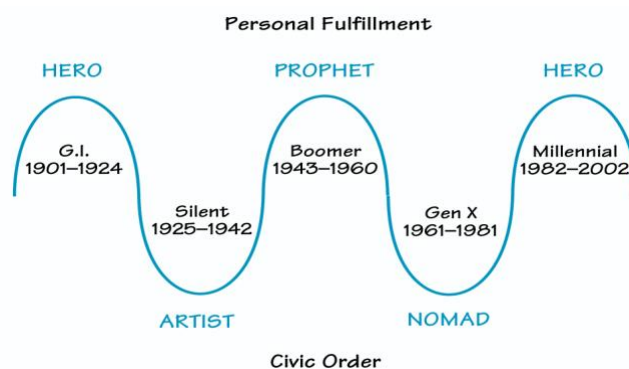


Figure 1. Repeating patterns of generational archetypes.

Note. Source: Empowering Multigenerational Collaboration in the Workplace, by D. Gilburg, 2007, *Systems Thinker*, 18(4). Retrieved from <https://thesystemsthinker.com>. Used with permission.

The Delphi method is a technique for gathering and distilling critical information about a subject from a panel of experts (Keil, Lee, & Deng, 2013). Project RAND developed this technique in 1946 as a mechanism for overcoming the shortcomings of traditional methods, theoretical approaches, quantitative models, and trend extrapolation (Keeney, Hasson, & McKenna, 2001). This technique is considered “particularly useful in areas of limited research, and is suited to explore areas where controversy, debate, or lack of clarity exist” (Iqbal & Pison-Young, 2009, p. 598). In using this method, researchers collect and aggregate input received from an expert panel to obtain the most reliable consensus of opinions by using questionnaires, guided by controlled feedback.

For this study, I used an online Delphi technique to obtain consensus from expert faculty members using a modified technique of a two-round questionnaire (Custer, Scarcella, & Stewart, 1999). This multistage approach yielded information from each stage to build on results from the previous round (Keeney, Hasson, & McKenna, 2005). The goal of the two rounds was to find consensus among the group. One main advantage of implementation of an online Delphi method in this study was having the ability to anonymously include many diverse individuals with expertise across the span of nursing education. In this study, I identified perceptions of successful strategies to work with multigenerational faculty. Although other researchers identified strategies for working cohesively in a multigenerational environment, this study focused on nursing faculty, a group and setting that had not been addressed.

### **Research Questions**

The research questions for this study follow:

1. What are the major factors that influence multigenerational collaboration among nursing faculty?
2. What are the major factors that produce friction among a multigenerational nursing faculty?
3. What strategies do a multigenerational nursing faculty rely on for successful collaboration?
4. What are the preferred strategies of Baby Boomers, Generation X, and Millennials?

### **Definition of Terms**

Below are terms defined from Merriam-Webster's Dictionary and Thesaurus (2014).

***Collaboration:*** The action of working with someone to produce something.

***Friction:*** Dissention or conflict between people from different backgrounds because of differing ideas or wishes.

***Generation:*** Most typically a group of people who are born and live around the same time (around 20 years) and share common characteristics.

***Multigenerational:*** Three generations of faculty working in the educational setting: Baby Boomers, Generation X, and Generation Y (the Millennials).

***Tolerance:*** A fair, objective, and permissive attitude toward those whose opinions, beliefs, practices, racial or ethnic origins, and life experiences differ from one's own.

### **Summary of the Chapter**

Influences shape generations; members of generations share basic beliefs in family, culture, values, and civic engagement that impact their world views.

Multigenerational collaboration can be a source of friction or tolerance (McNally, 2017).

Nursing educators are not immune to the challenges that surround multigenerational collaboration, as their workforce comprises members of three dominant generations. Implementation of a research study using an online modified Delphi method exposed the challenges and consensus among nursing faculty and revealed successful collaboration strategies that are pertinent to working in a multigenerational workforce.

## Chapter Two

### Review of the Literature

Members of generations can vary greatly from one another. The ability to work together in harmony, promoting generational tolerance, is a challenge. Although all nursing faculty should be held to the same standard, without an understanding of successful multigenerational collaboration strategies, generational cohorts are likely to work in an environment of friction. “Creating an environment where all four generations can coexist and thrive is proving to be a challenge to corporate America” (Wieck, Dols, & Northam, 2009, p. 169). Differences in career expectations and working styles makes it difficult to create cohesive teams among nursing faculty (Graystone, 2019).

Nursing faculty incivility and intolerance of generational differences may result in negative outcomes including decreased productivity, increased turnover, negative outcomes for students, decreased program satisfaction, and increased stress levels for those involved (Clark & Springer, 2007; Clark, 2017; Coulter & Faulkner, 2014; Luparell, 2004, 2007; Marchiondo, Marchiondo, & Lasiter, 2010). Nurses widely acknowledge the old adage that nurses “eat their young,” streaming across the lines of every specialty, including education (Farrell, 2001; Rowe & Sherlock, 2005, Thomas & Burk, 2009; Woelfle & McCaffrey, 2007). Additionally, tension between nurses caused by multigenerational settings is more than an annoyance because of its permeation through every facet of nursing (Santos & Cox, 2000). Conflict and incivility can expand and



progress into behaviors that are aggressive (Andersson & Pearson, 1999; Caza & Cortina, 2007; Cortina, Magley, Williams, & Langhout, 2001; De Gagne, Yamane, & Conklin, 2016).

Most research on generational differences focus on the descriptions of each group with an emphasis on general perceptions or recruitment and retention issues (Jobe, 2014). Intolerance or incivility decreases employees' ability to work together, commit to the organization, and remain productive, and increases absenteeism (Buhler, 2007; C. M. Clark, 2010; Felblinger, 2009; Gardner & Johnson, 2001; Glendinning, 2001; Hornstein, 2003; P. Johnson & Indvik, 2001; McCune, 2000; Pearson, Andersson, & Porath, 2000; Pearson & Porath, 2005; Salin, 2003; Settles, Cortina, Malley, & Stewart, 2006).

A body of literature focuses on the topic of adaption and placement of value on generational differences to promote cohesion in the workplace (Apostolidis & Polifroni, 2006; Ferres, Travaglione, & Firms, 2003; Graystone, 2019; Palese, Pantali, & Saiani, 2006; Sirias, Karp, & Brotherton, 2007; Weston, 2006). The more the workforce pulls together to reach common meaningful efforts, the less pronounced their generational differences will be perceived (Rentz, 2015). Generational tensions occur even if an organization is run effectively. Differences between generational cohorts are so deeply rooted, they often cannot be offset by successful attempts at collaboration (Rentz, 2015).

The literature review on multigenerational collaboration identified four themes that vary among the generations: communication, work style, ethics, and motivation. Each theme comprises several subthemes that influence positive or negative outcomes. The present study examined four components/themes of collaboration that influence the

process of working with different generational cohorts and may influence the process of successful collaboration in the workplace.

### **Communication**

Communication is “the imparting or exchanging of information or news and is a means of connection between people or places in particular” (Merriam-Webster’s Dictionary and Thesaurus, 2014, p .157). Millennials appreciate authenticity, and “if what they are promised is not met, they leave” (Twenge & Campbell, 2008, p. 866). It is important to ensure that communication is “understood, so as to reduce the risk of errors that come with communication failures” (Sherman, 2006, p. 4). Communication is essential and inevitable in human relationships.

### **Feedback**

According to Sherman, “Baby boomers prefer communication that is open, direct, and less formal” (2006, p. 4). They expect their feedback to be planned and scripted, and place high importance and value on communication (Gibson, 2009; Lancaster & Stillman, 2005). In contrast, Millennials are accustomed to having the ability to retrieve information 24 hours a day, 7 days a week, with instant access to information at their disposal. This type of instant gratification has led to a deep desire for immediate feedback (Johnson & Romanello, 2005; McGlynn, 2005; Pardue & Morgan, 2008; Simons, 2010; Skiba, 2005; Tapscott, 2009). Hall (2016) asked Millennials to rate their comfort on negative feedback from their superiors; the average response on a 1–5 scale was 3.81. When asking the same question about negative feedback from coworkers, the response level dropped to 3.5. Coates (2007) and McGlynn (2005) reported Millennials have difficulty with conflict; however, they want to be heard and relate their life experience

when they are sharing information they believe is valuable (Gibson, 2009; Gilburg, 2007; Rentz, 2015; Tapscott, 2009; Tolbize, 2008). In addition, Millennials can become increasingly frustrated when their e-mails and phone calls are not answered quickly (Sacks, 2006).

## **Preferences**

Generation X members prefer straightforward and honest communication and do not want to be bothered by unnecessary meetings, although they are willing to participate in meaningful discussions (Gibson, 2009; Johnson & Romanello, 2005; Lancaster & Stillman, 2005; Simons, 2010). Stimulating communication about the diverse needs of generations can help alleviate frustrations, thereby resulting in conflict resolution (Raines, 2003). Nursing faculty who are knowledgeable about diversity play important roles in facilitating effective communication and collaboration between members of the generations (Earle & Myrick, 2009).

## **Recommendations**

Wieck (2005) provided recommendations for improving communication:

Make an effort to see the other person's viewpoint. Read about the other generation and gain an appreciation for where they have been and where they are going. Older nurses should remember the younger generation is the way they were raised to be, and the younger nurses should remember that the previous generations lived through chaos and strife to make things better. Appreciating histories rather than resenting them, makes finding common ground easier. (p. 10)

Communication influences perspectives. Understanding that members of generations bring their own perspectives to the workplace is key to improving outcomes and decreasing challenges (Coulter & Faulkner, 2014).

## **Work Style**

Merriam-Webster Dictionary and Thesaurus (2014) defined work as

actively involving mental or physical effort done in order to achieve a purpose or result; the act of being engaged in physical or mental activity in order to achieve a purpose or result, especially in one's job; or to operate or function. (p. 955)

“Forty-five percent of nurse educators stated they were dissatisfied with their current workload, and one in four stated they were likely to leave their current job stating workload as a motivational factor” (American Association of Colleges of Nursing, 2019, p. 4). Baby Boomers were generally more satisfied with their jobs than Gen Xers or Gen Y, with Millennials reporting the highest levels of burnout in a study of more than 8,000 nurses (Widger, Pye, Cranley, Squires, & Tourangeau, 2007).

## **Perceptions**

In a study exploring differences among cohorts of nurses in relation to work perceptions, Baby Boomer nurses were more committed to the workplace, had higher job satisfaction, and were less emotionally exhausted than younger nurses, i.e. Gen Xers and Millennials (Blythe et al., 2008). Gen Xers reported greater distress levels in the workplace than their Boomer counterparts across the four distress variables of exhaustion, cynicism, turnover intent, and physical symptoms (Leiter, Price, & Spence Lashinger, 2010). In addition, Generation X nurses perceived a less civil workplace regarding supervisor, coworker, and team incivility (Leiter et al., 2010).

## **Description of Workers**

Generations in the workforce vary greatly between cohorts. Words to describe Baby Boomers in the workforce include faithful employees, have a passion for work, workaholics, and self-absorbed (Coates, 2007; Denaro, Giorgi, Sderci, & Perez, 2018;

Gibson, 2009; Gilburg, 2007; Lancaster & Stillman, 2005; Rentz, 2015; Tolbize, 2008). On the opposite of the spectrum, Gen Xers are considered not to be loyal to their workplace, prefer to work independently, are self-reliant, adaptable, resourceful, and have even been called slackers (Coates, 2007; Collins & Tilson, 2000; Gibson, 2009; Howe & Strauss, 2000; Lancaster & Stillman, 2005; Rentz, 2015; Tolbize, 2008; Weston 2001). Millennials feel like they need to have meaningful work, must believe they are solving a problem, love structure and group work, but tend to career hop (Gibson, 2009; Howe & Strauss, 2000; Johnson & Romanello, 2005; Lancaster & Stillman, 2005; Rentz, 2015; Skiba, 2005; Stanley & Dougherty 2010; Tapscott, 2009; Walker et al., 2006).

### **Mentoring**

Generational differences can affect the mentorship experience, as people can be more effective if they share goals and align expectations. In academia, mentorship is a cornerstone of success (Mohr, Moreno-Walton, Mills, Brunett, & Promes, 2011). Baby Boomers believe that if employees receive too much training/skills, they will leave the workplace. Gen Xers state, “the more they learn, the more they stay,” and Millennials have a sense that continuous learning is a “way of life” (Sedrak & Cahill, 2011, p. 33). If Generation Xers view the mentoring experience as a right and not a privilege, and their focus is to attain their own goals, the mentoring relationship will be challenged as older cohorts may view them as self-centered (Mohr et al., 2011). Millennials like collaboration in the workplace with a sense of mentorship (Taylor, 2018). Nursing faculty have a continuous opportunity to guide the upcoming faculty workforce into a healthy transition using a mentoring relationship (Bavier, 2016).

## **Technological Impact**

Millennials are considered the most technologically savvy of all generations, as they grew up in a digital age and have been surrounded by technology since birth (Earle & Myrick, 2009; Pardue & Morgan, 2008; Proserpio & Gioia, 2007; Rentz, 2015; Simons, 2010; Tolbize, 2008). Baby Boomers feel technology is nice but not essential in the workforce (Mangold, 2007; Rentz, 2015; Tolbize, 2008). Generation X is considered literate in technology, but not as proficient as their counterparts the Millennials (Raines, 2003; Rentz, 2015; Tolbize, 2008).

## **Recommendations**

Wieck (2005) provided workplace recommendations for multigenerational collaboration:

Work at making the environment pleasant. If you want to have a nice garden, you must put forth the effort. Anything worthwhile takes some time and energy. Young nurses need to seek input and respond with efforts to improve their work performance, while seasoned generations should provide positive and constructive feedback to improve the workplace setting. (p. 11)

Litchfield and Matteis, (2016) recommended technological collaboration among generations “utilizing of a team system in which a faculty member from the Millennial generations and an educator from the Baby Boomer generation team up to learn about technology together” (p. 4.). Although the generational profile in the workplace will continue to blend, it is essential to keep in mind the potential disconnections and varied needs of a multigenerational workforce (Meilink & Grimes, 2015).

## **Ethics**

Ethics means “a set of moral principles, a theory or system of moral values; a guiding philosophy” (Merriam-Webster’s Dictionary and Thesaurus, 2014, p. 282).

Nursing faculty may include their belief systems, integrity, and core values when they consider their ethical viewpoint. Work ethic in particular “may be defined as a set of beliefs and attitudes reflecting the fundamental value of work” (Meriac, Woehr, & Banister, 2010, p. 316). The need to shift generational values in relation to work ethics can be a major source of friction among members of the workforce (Minnis, 2004). Santos and Cox (2000) explored factors influencing occupational adjustments relating to workplace stress across generational lines. They found generational conflicts and differences in work adjustments. In a survey with focus groups, Baby Boomers expressed strong negative attitudes toward Gen Xers, although Gen Xers did not have the same negative perceptions of Baby Boomers (Santos & Cox, 2000).

### **Loyalty**

Using the Multidimensional Work Ethic Profile, members of Generation X had higher morality/ethics mean scores of 47.28, compared to Baby Boomers 46.82, and Millennials at 46.59 (Jobe, 2014). Gen Xers are noted to have the highest loyalty to family and place their families ahead of their jobs (Mohr et al., 2011; Simons, 2010; Tolbize, 2008). Gen Xers value their time off, and work to live rather than live to work, in contrast to the generational cohorts who proceed them (Gibson, 2009; Gilburg, 2007; Mohr et al., 2011; Rentz, 2015). Baby Boomers are the most loyal to the workplace and are conscientious and willing to help those who follow them, but can be judgmental and overconfident (Coates, 2007; Hatfield, 2002; Gibson, 2009; Rentz, 2015; Strauss & Howe, 1991; Tolbize, 2008; Zemke, Raines, & Filipczak, 2000).

## **Skepticism**

Gen Xers were raised as latchkey kids, and many came from broken and single-parent households. Thus, they learned to rely on themselves and are skeptical of others (Gibson, 2009; Gilburg, 2007; Lancaster & Stillman, 2005; Rentz, 2015). In contrast, Gen Xers are tolerant of cultures and lifestyles of those unlike themselves, much like Millennials. Millennials are the most ethically and radically diverse generation, with multicultural influences impacting their thought processes (Gibson, 2009; Gilburg, 2007; Lancaster & Stillman, 2005; Rentz, 2015; Tapscott, 2009).

## **Motivation**

Motivation is “the reason or reasons one has for acting or behaving in a particular way; or the general desire or willingness of someone to do something” (Merriam-Webster’s Dictionary and Thesaurus, 2014, p. 543). In a study of social rewards including good pay, job security, and respect, nurses in all generations placed higher value on financial rewards and job security than they did on respect (Takase, Oba, & Yamashita, 2009). However, nurses born before 1960—The Silent Generation and Baby Boomers—valued pay and job security less than nurses from Generation X or Millennials (Takase et al., 2009). Millennial nurses reported their social world played an important role in their choice of career (Price, McGillis Hall, Angus, & Peter, 2013).

## **Extrinsic/Intrinsic Rewards**

Twenge et al. (2010) reported Gen Xers significantly valued extrinsic rewards ( $p < .05$ ) more than Millennials; however, Millennials significantly placed higher value on extrinsic rewards than their Baby Boomer counterparts. “In contrast, each generation is increasingly less likely to value intrinsic rewards as highly as the previous generation”



(Schullery, 2013, p. 260). Social rewards had a similar relationship to intrinsic rewards. Generation X members valued social rewards most, followed by Millennials and, last, Baby Boomers (Twenge et al., 2010). Millennials want instant gratification and value leisure time and extrinsic rewards because they feel in charge of creating a life for themselves but understand they cannot determine the outcome of their decisions (Kelan, 2014).

### **Recommendations**

To improve motivation, Wieck (2005) recommended,

Focus on outcomes. Nursing research is directing time and money at outcomes-driven patient care. Since the younger generations are geared toward activities that have a purpose/to achieve a goal, older nurses should use meetings to determine the outcomes, and let the younger generations focus on solving the problems and achieving desired outcomes. (p. 11)

Motivation in a multigenerational workplace can improve by promoting collaboration and celebration, enabling personal growth and work–life balance, and working to enhance the well-being of individuals (Gurchiek, 2016).

### **Summary**

Generations vary greatly, contributing to difficulties with multigenerational collaboration. Incivility among nursing faculty results in negative outcomes in the workplace setting and for students in programs who will soon enter the workforce. Generational tension and friction permeate every aspect of nursing. Four themes that vary among generations include communication, work style, ethics, and motivation. These themes influence whether successful multigenerational collaboration occurs or if generational friction results.

Although the literature depicts generational traits, preferences, and themes, it is unknown how these traits, preferences, and themes impact success or failure of multigenerational collaboration in the workforce. In addition, the consensus of successful collaboration techniques to work with multigenerational faculty is unknown in nursing education. This study aimed to determine if strategies in the literature align with current practice, answered through an online Delphi study.

## Chapter Three

### Methods

This chapter contains an overview of the study methods. The chapter includes the purpose, research questions and hypothesis, overall design, and methods of data collection and management. Also, in this chapter, I discuss the analysis process, protection of human subjects, sample, and inclusion criteria.

#### **Purpose**

The purpose of this study was to obtain information related to elements of successful collaborative teaching in a multigenerational nursing faculty comprised of representatives from the Baby Boomers, Generation X, and Millennial generations. I explored strategies that enhance multigenerational faculty collaboration to discern better educational environments for the next generation of nurses. Information about the sample, ethical considerations, and the chosen research techniques follow.

#### **Research Questions**

The research questions for this study were:

1. What are the major factors that influence multigenerational collaboration among nursing faculty?
2. What are the major factors that produce friction among a multigenerational nursing faculty?
3. What strategies do a multigenerational nursing faculty rely on for successful collaboration?

4. What are the preferred strategies of Baby Boomers, Generation X, and Millennials?

### **Design**

For this study, I used a two-round online modified Delphi research technique. The Delphi is a “systematic process of consulting, collecting, evaluating, and tabulating the opinions of a panel of experts on a particular topic without bringing them together” (Blackwood, Albarran, & Latour, 2010, p. 552). The implications of using an online Delphi technique include the ability to identify variables and establish expert consensus through analysis of data (Keeney et al., 2001). The chosen online modified Delphi technique, although similar to the full Delphi, employed two-rounds of data collection rather than three rounds (Custer et al., 1999).

The online Delphi is an appropriate method for a variety of reasons:

(a) identification of preferred collaboration strategies does not lend itself to objective analysis through direct observation. Instead, the collection of subjective statements and ideas can be combined collectively; (b) A face-to-face exchange with a multigenerational sample of faculty would be extremely difficult and financially draining; (c) Group meetings would not be feasible due to financial constraints, time factors, and work demands of participating faculty; (d) Anonymity is essential to obtain information that may elicit controversial opinions, incite conflict, or lead to backlash from faculty coworkers (Linstone & Turoff, 2002).

Implementation of the online Delphi technique allows expert participants to deliver information for the ultimate purpose of building composite models of a situation in a study without the need for consensus on the information (Linstone & Turoff, 2002).

The online Delphi model allows a researcher to identify and explore collaboration strategies among generational cohorts while exploring key strategies employed. The “Delphi method relies on expert opinion, professional experience, and sometimes intuition and tacit knowledge to render a forecast on a given issue of importance” (Baker & Moon, 2008, p. 150). In this study, I sought a variety of expert nursing faculty opinions to obtain perceived successful collaboration techniques among multigenerational groups. I solicited information from the expert panel in a two-round format. See Appendix A for a figure depicting each of the two-rounds.

## **Procedures/Methods**

### **Sample**

I received approval from the University of Texas at Tyler Institutional Review Board (IRB), and invited an expert panel to participate. I selected participants from nursing schools in the State of Texas. The State of Texas houses 118 nursing schools, one diploma school, 67 associate degree, and 50 baccalaureate degree programs. I used cluster randomized sampling to select nursing schools to reach faculty members for the expert panel. I employed an online program, The Randomizer®, to randomly select 30% of the eligible nursing programs. Of the 118 schools, two schools were exempt from the random sampling: Covenant School of Nursing is currently the only diploma program in Texas, and El Paso Community College is my employer.

Delphi studies have no agreement on sample size or panel number requirements. The use of large panels is discouraged due to difficulties in managing the volume of qualitative data from first rounds (Day & Bobeva, 2005; Keeney, Hasson, & McKenna, 2011; Linstone & Turoff, 2002). Most Delphi studies employ panel sizes from 10 to 100

participants. Online Delphi methods rely on group dynamics rather than statistical power to obtain consensual results (Okoli & Pawlowski, 2004).

I set a goal of 75 participants, 25 from each generational cohort, for the first round of this study. Initially, reaching out to deans to disseminate information to their faculty helped improve initial response rates. Not all faculty who I solicited to participated completed the study; however, identifying endorsed or experienced individuals helped identify experts and colleagues in areas to improve response rates (Hsu & Sandford, 2007; Portney & Watkins, 2015). The initial plan was to reach a large enough number of schools to ensure an adequate initial sample. To obtain a sample size of 75 initial participants, I contacted 30% of all nursing schools in Texas. In an online three-round policy Delphi study, researchers lost approximately 50% of respondents per round. In a study by Gary (2014), the Round 1 expert group was 115, with a drop to 55 panelists in Round 2, and the final round ended with 34 panelists. Therefore, if I obtained 75 respondents for Round 1, 25 per generational cohort, 50% losses in each round would result in the second or final round of 38 participants or 12 per generational cohort.

I randomly selected a total of 30% of the schools of nursing in Texas to receive an invite to participate: 15 baccalaureate programs and 20 associate degree programs (ADN). I sent letters to the deans of nursing or program coordinators from the randomly selected Texas schools (see Appendix B). I asked the deans to disseminate the introductory invitation letter and survey link to faculty in their program. The goals of the sample were to achieve equal representation from faculty from three generational cohorts: Baby Boomers, Generation X, and Millennials.

Data accrued through the online survey program Qualtrics®. Nursing faculty who received the invitation were able to respond to the solicitation e-mail (see Appendix C). I did not notify deans of nursing which faculty members consented or declined participation in the panel. Respondents did not send responses directly to me; rather, expert panel members responded and clicked on the Qualtrics® link to participate in both rounds of the study.

Participants had no obligation to participate in the study. Consent was obtained for participations prior to completion of the questionnaire. In addition, the first-round questionnaire was piloted to a convenience group of six nurses, two from each generational group (who met inclusion criterion), and I revised the questionnaire and delivery methods based on recommendations from the pilot-study group.

### **Inclusion and Exclusion**

Because the selected schools offered ADN's and bachelor's in nursing programs (BSN), it was essential to select panel members that met minimum schooling eligibility. Inclusion criteria for the selected faculty for the panel consisted of nursing faculty who had obtained a minimum of a master's in nursing (Master of Science or Master of Science in Nursing). In addition, faculty had to be currently teaching full time in their program and have a minimum of 2 years of experience in teaching. It was important to select faculty members who were not only engaged in their teaching environment with students, but also who had maximum interaction with other members of the nursing faculty. Part-time instructors may not have the same demands and work expectations as full-time faculty. Selected panel members worked in areas where collaboration with others from different generational cohorts was essential.

**Round 1.** I randomly selected schools of nursing from 116 nursing schools in Texas. Round 1 targeted 30% of the nursing schools in Texas, totaling 35 schools, 15 baccalaureate programs, and 20 associate programs. The target size for Round 1 of the expert panel was 75: 25 from each generational cohort, and 2–3 faculty members from each selected school. I assigned each of the 116 schools a number and all numbers were selected by The Randomizer®, with a total of 35 schools drawn for participation. The Randomizer® selected 20 ADN program numbers, and 15 BSN program numbers. After selecting schools, I notified deans of the nursing or program coordinators of the study by e-mail and asked them to disseminate the solicitation e-mail and survey link to their faculty members. I sent a reminder e-mail to the deans after 1 week when I had not achieved the desired participation numbers. Panel members answered demographics and eligibility criteria questions prior to being directed to the initial survey question (see Appendix D). Participants who did not meet eligibility criteria were directed to the end of the survey and thanked for their interest and time in the study; that is, they did not complete the Delphi survey.

**Round 2.** The second round used the same expert panel that responded to Round 1. An invitation for Round 2 was sent to the Round 1 panelists using their emails given in the Round 1 questionnaire (see Appendix E). Using the list of statements generated from Round 1, I formulated the second-round questionnaire. I sent a reminder e-mail to help improve participation rates for Round 2, anticipating a potential drop rate of 50% of participants. The goal of participation in Round 2 was 36 expert panelists, 12 from each generational cohort. I sent reminder e-mails and offered all participants a chance to win a \$100 Amazon® gift card. One random participant who choose to be entered in the



drawing won the gift card. In an effort to ensure sufficient Millennial panel group numbers, a reminder email was sent specifically to the Round 1 Millennial panelists who did not respond to the first or second Round 2 invite (see Appendix F). Round 1 Millennial participation was 12 participants, and I expected a 50% loss of panelist in the rounds, I felt a reminder email targeting Millennials was essential to avoid a 50% loss of the low number of Millennial panelists.

### **Protection of Human Subjects**

Prior to starting the research, The University of Texas at Tyler IRB reviewed and approved this study (See Appendix G). In addition, I provided participating institutions with information about the IRB approval. A request to obtain IRB approval was made by Tyler Junior College before the survey was disseminated. IRB consent was obtained from Tyler Junior College (See Appendix H). Each participant received an informed-consent form with an explanation of the anticipated benefits and risks. Benefits included individuals contributing to nursing research, advancing nursing practice, and potential identification of new techniques to improve collaboration with other generational groups. Risks included time constraints to fill out surveys and unpleasant feelings from past negative experiences. Panelists conceded their understanding of the study and indicated consent prior to participation. In addition, I provided each participant with information to learn about the findings of the study upon completion. The informed-consent form appeared on the first page of Round 1, and upon acceptance, the participant was led to the survey questionnaire.

Anonymity was maintained between participants and the researcher. I knew only the names of the two winners of the incentives from Round 1 and Round 2. Responses

were not linked to individuals. I stored all data collected in the study in a password-protected file on my personal computer or backed up on a password protected and encrypted USB. I made all efforts to guard identities and report all findings in aggregate without identifying information including names or participating Texas institutions.

### **Instruments/Measures**

The online Delphi method uses qualitative and quantitative measures to aggregate and summarize expert data to find consensus among participants (Linstone & Turoff, 2002). I examined each round, and used the information obtained from the previous round to frame the questions in the following round.

According to Turoff (1975), the Delphi design includes 6 steps:

- (1) “Formulation of the issues.
- (2) Exposing the options.
- (3) Determining initial positions on the issues.
- (4) Exploring and obtaining the reasons for disagreements.
- (5) Evaluating the underlying reasons.
- (6) Reevaluating the options.” (p. 88)

In this study, I asked first-round expert-panel participants to expand on the research questions to formulate themes. I collapsed the open-ended responses into a format that was suitable for obtaining additional information in the next round, after consulting with my dissertation chair and a qualitative research expert. I created and disseminated Round 2 questionnaires using Round 1 findings and themes, after consulting with my dissertation chair.

## **Data Collection**

### **Round 1**

I asked participants to identify the factors they believed impacted multigenerational collaboration in nursing faculty, positively or negatively. In addition, I asked what specific strategies they relied on for collaboration. Last, participants commented on how those strategies used in the workplace differed among generations. I gathered and divided data into each respective generation. I used open-ended questions to solicit information.

### **Round 2**

Participants rated subtheme statements using a 10-point Likert-type scale with 10 being “extremely important” and 1 being “not important.” I divided subthemes into three factor categories: positive influences, sources of conflict/negative influences, and teamwork collaboration. Each participant had to rate the subthemes using the 10-point Likert-type scale. Upon completion of the rating of each subtheme, I asked participants to rank their top three subthemes for each factor category (see Appendix I).

## **Data Management**

I received all data in electronic format and stored them on my password-protected personal computer and password-protected encrypted USB backup. I stored all identifiable information about the panelist who registered for the incentive in this same secure format. I deleted all information provided about incentives for participants after the drawing, notification to the recipients, and confirmation of the receipt of the incentives from Round 1 and Round 2. I analyzed quantitative data from Round 2 using the Statistical Package for Social Sciences (SPSS Version 24, Chicago, IL, USA). I was

responsible for all data collection, analysis, interpretation, and use, with consultation with my dissertation chair and dissertation committee members.

### **Statistical-Analysis Plan**

The goal of the online Delphi method was to develop a composite model of the phenomenon with a level of consensus while exploring differences in panelists' viewpoints. Statistical significance was not the goal; rather, the goal was to gain understanding of the phenomena and discover differences in consensus or the lack of consensus. Finding consensus among multigenerational cohorts provides informational data to support congruency among generations.

For Round 1, I applied a conventional content-analysis technique. In using this method, I was able to discern patterns and themes and eliminate duplication. I edited and reexamined responses, resulting in a set of unique individualized statements (aligned with Hsieh & Shannon, 2005). Last, I grouped all themes/statements into subthemes that identified common viewpoints. I generated a factor list of subthemes for Round 2 dissemination.

I averaged the Round 2 survey results from the 10-point Likert-type scale to discover the subtheme means. I examined each subtheme to determine its validity using the diagnostic content validity (DCV) score. To determine the DCV score, I multiplied subtheme mean scores by 0.10 to achieve a final DCV that is equal to or less than 1 (as suggested by Fehring, 1987). I determined diagnostic efficiencies of items using a priori standards to discard items with  $DCV < 0.50$ . I retained minor descriptors if DCV scores were between 0.50 and 0.80. I defined as major defining characteristics, scores categorized and retained if their  $DCV > 0.80$  (as in Wieck, 1996). Therefore, the higher

the DCV score from Round 2, the more accurate and complete the subtheme given by participants in Round 1. I used DCV scores to discriminate between the subthemes and to see if consistency or discrepancy arose among generational cohorts for those subthemes.

### **Procedures to Enhance Control or Rigor**

The ability of participants to extend and revise their data, and the use of consensus to determine which themes are valid enhances control in an online Delphi study (Linstone & Turoff, 2002). In this study, I allowed participants to revise their answers in the Qualtrics® survey before submission. Rowe and Frewer (2005) argued, “the more precise our definitions, the better (more reliability, validity) we can conduct research, the easier it is to interpret findings, and the greater the confidence we have in our conclusions” (p. 252). Thus, I consulted with a qualitative research expert when determining themes and subthemes from the Round 1 data.

I clearly separated themes from Round 1 qualitative answers and developed subthemes for Round 2 analysis. My dissertation chair worked with me to discuss and determine appropriate themes and subthemes. Researchers obtain truthful representation of participant consensus by examining responses to see which data are deemed valid (Brady, 2015). Researcher bias is a possibility in Delphi studies; therefore, I reduced the risk of bias by having a qualitative data expert examine Round 1 results. My dissertation chair examined Round 2 results with me, and I took extreme care to apply the findings.

### **Summary**

This chapter provided an overview of the study’s purpose and research questions. I explained the design with procedures and methods and discussed the sample size, inclusion/exclusion criteria, and data-collection process. The chapter provided a review

of the protection of human subjects, instruments, and methodology. Last, I discussed data management, statistical analysis, and procedures to control rigor at the conclusion of the chapter.

## Chapter Four

### Results

Chapter 4 includes all findings related to the study and the discussion of the qualitative and quantitative data analysis from each round. In this chapter, I discuss the research participants and analysis of the research questions, as well as exploring the findings. The chapter ends with a summary of the findings from Rounds 1 and 2.

#### **Research Participants**

I invited an expert panel of nursing faculty in the State of Texas to participate in the initial round of data collection. I used a cluster randomized-sampling method to select nursing schools with faculty members who would meet eligibility to participate in the panel. I contacted 30% of all nursing schools in Texas after completing a random-selection process using an online program to pick numbers: Randomizer®. Nursing baccalaureate programs (50 schools) and associate degree nursing programs (67 schools) were numbered 1–50 and 1–67. The Randomizer® program selected a set of 15 numbers for the baccalaureate choices, and another set of 20 numbers for the ADNs. I chose the nursing programs with the corresponding numbers for the study: 15 baccalaureate programs, and 20 ADNs.

I sent an e-mail to the deans of nursing or program coordinators from selected schools to solicit participation from their faculty (see Appendix B). For Round 1, faculty participants received e-mails from their deans and program coordinators with a letter and

link to the Round 1 survey (see Appendix C). I sent reminder e-mails every 7 calendar days to the deans and program coordinators to solicit responses. I sent Round 2 e-mail invitations directly to participants from Round 1 (see Appendix E). I allotted 21 calendar days for responses in Round 2. I sent reminder e-mails to participants every 7 days for a total of three e-mails after the initial Round 2 invitation. I sent Millennial panelists a personal e-mail to ensure adequate Millennial representation. (see Appendix F).

For Round 1, a total of 112 participants began the survey through Qualtrics. Upon data analysis, 87 surveys met all the demographic and inclusion criteria guidelines; I deleted 25 because they were not completed or did not meet criteria. In addition, the Silent Generation was represented by three surveys; therefore, those were not included because of lack of ability to represent that generational cohort adequately. Silent Generation cohort answers to the qualitative questions from Round 1 were similar to the answers received from the Baby Boomer cohort. However, the Silent Generation reported no positive-influence strategies, negative influences, or conflict, and no teamwork strategies for working with older faculty, as they stated they were the oldest in the workplace. The final sample for Round 1 included 84 surveys.

I collected demographic data on all participants to distinguish characteristics among the expert panel. The Round 1 sample consisted of 84 participants who were all licensed RNs in the United States, with a master's or doctorate. All panel members worked full time at their jobs, and 93% of the experts had a direct student/teaching assignment. I asked panelists to give their specific job titles which included Deans, 3%; Program Coordinators, 14%; Team Leaders, 11%; Lecturers, 18%; Clinical Faculty, 26%; Didactic/Clinical/Laboratory Instructors, 16%; Laboratory Instructors, 1%; and Other,



11%. Of the 11% who answered “other” for their positions, they were tenure track, associate professors, professors, skills laboratory, researchers, simulation coordinators, or online faculty. Teaching experience varied from 2 to 35 years and 92% of participants were women. Panelist ages ranged from 28 to 69 years. Baby Boomers totaled 45 panelists or 54%, Generation X represented 27 panelists or 32%, and Millennials had 12 panelists or 14%. See Table 1 for complete Round 1 demographic data.

Table 1

*Demographics Profile*

Round 1			Round 2		
	<i>n</i> = 84	Percent		<i>n</i> = 59	Percent
Gender			Gender		
Male	7	8	Male	4	7
Female	77	92	Female	55	93
Type of program			Type of program		
Graduate	17	20	Graduate	15	25
BSN	36	43	BSN	21	36
ADN	31	37	ADN	23	39
Position			*Did not collect data on position or direct student or teaching assignment in Round 2		
Dean	3	3			
Program coordinator	12	14			
Team leader	9	11			
Lecturer	15	18			
Clinical faculty	22	26			
Lab instructor	1	1			
Didactic/Clinical/lab instructor	13	16			
Other	9	11			
Direct student or teaching assignment					
Yes	78	93			
No	6	7			
Generational cohort			Generational cohort		
Baby boomers	45	54	Baby boomers	31	53
Generation X	27	32	Generation X	19	32
Millennial	12	14	Millennial	9	15

*Note.* \*Other Position: Tenure track, associate professor, professor, skills lab instructor, researcher, simulation coordinator, online faculty, BSN = Bachelor Science in Nursing; ADN = Associate's Degree in Nursing.

Round 2 had a total of 59 participants who responded to the e-mail and completed the survey. I asked panelists to give their gender: 93% of the sample was female. Of the sample, 25% taught in graduate programs, 36% in BSN programs, and 39% in ADN

programs. Generational cohorts were as follows: Baby Boomers 31 or 53%, Generation X 19 or 32%, and Millennials 9 or 15%. Round 2 demographics were consistent with those of Round 1 with similar percentages of gender, type of program, and generational cohort (see Table 1).

### **Round 1 Factor Identification**

The purpose of Round 1 was to gather a list of factors that answered the five original survey questions. Each generational cohort had an opportunity to represent their age group by giving narrative answers to the questions:

- Factors that positively influence work with nursing faculty who are older or younger than the panelists
- Factors that negatively influence work with faculty who are older or younger than the panelists
- Factors that are the biggest sources of conflict encountered when working with others not in their age group
- Factors that help with teamwork interactions with older faculty
- Factors that help with teamwork interactions with younger faculty

I transferred all answers by panelists in the Qualtrics® survey to an Excel sheet, divided by questions and sorted into generational cohorts. I used conventional content analysis to organize and group an exhaustive list of generalized themes and specific subthemes (Hsieh & Shannon, 2005). For example, several original statements described factors that positively influenced work with nursing faculty who are not in their generational cohort. I placed each statement given by panelists in a theme category. Under theme categories, I divided statements given by panelists into specific subthemes to generate an exhaustive list, separated by generational cohort. Another PhD-prepared

qualitative data-analysis expert assessed the processing of raw data from the Qualtrics® data set to the list I prepared, to ensure consistency. The qualitative data expert and I discussed ideas until we reached consensus.

An example of the conventional content analysis was as follows: One participant provided factors that positively influence their work, “Younger faculty have fresh ideas. I have noticed they are extremely confident in what they do. Diversity of ideas and philosophies.” The general themes from these statements during the content analysis process were, *open, character traits, and diversity*. I expanded these general themes into subthemes from the original statements: *being open to their ideas, confidence, and diversity*. I counted and listed each subtheme by generational cohort to assemble a comprehensive list of themes and subthemes. Table 2 displays an example of this content-analysis factor-identification process. I examined each statement, numbered the condensed codes/themes, and identified the corresponding subtheme in the condensed theme/subtheme column. Table 2 shows a total of six statements given by Baby Boomers, Generation X, and Millennial participants listing positive influences on work.

Table 2

*Example of Phase 1 Content-Analysis Process*

Describe factors that positively influence your work with nursing faculty who are younger or older than you are:			
Original statement	Condensed codes (themes)	Condensed themes (subthemes)	Generational cohort
Younger faculty have fresh ideas. I have noticed they are extremely confident in what they do. Diversity of ideas and philosophies.	1. Open 2. Character Traits 3. Diversity	1. Being open to their ideas 2. Confidence 3. Diversity	Baby boomer
Successfully working with other colleagues requires good communication, patience, and a spirit of cooperation. It is important to maintain an attitude that there are many different approaches to solving a problem and different ideas are not necessarily right or wrong.	1. Communication 2. Character Traits 3. Cooperation 4. Open	1. Good communication 2. Patient 3. Cooperation 4. Being open to their ideas	Baby boomer
Having a common Christian faith has been the most positive influence among multigenerational faculty. Additional positive influences have been like-minded, strong work ethic, and positive disposition.	1. Similarities 2. Shared goals 3. Shared goals 4. Character Traits	1. Having the same focus/ideals 2. Same faith 3. Work ethic 4. Positivity	Generation X
New ideas from the young. Typically, they have exciting or interesting ideas; or they can incorporate the use of technology where it is meaningful into nursing education.	1. Open 2. Technology	1. Being open to their ideas 2. Being technology savvy	Generation X
They are all older. Positive factors: they listen, they don't try to tell me how to do my job, they are encouraging, and they share stories from their life, like a friend, not like someone older and wiser. They focus on our commonalities instead of our differences.	1. Open 2. Communication 3. Communication 4. Mentoring 5. Similarities	1. Good communication 2. Validating perspectives 3. Recognition/encouraging 4. Sharing experience 5. Common interests	Millennial
Seeking to understand the others' perspective when issues arise. Respect for one another and civil interactions. Maintaining a positive mindset about other people instead of looking for faults and always being open to learning from others' perspectives	1. Communication 2. Respect 3. Character Traits 4. Open	1. Validating perspectives 2. Respect for others 3. Positivity 4. Open to learning from them	Millennial

Once I labeled all statements by themes and divided them into subthemes separated by generational cohort, I counted the subtheme totals for number of times a

panelist mentioned each subtheme. Each open-ended question resulted in a factor chart. I calculated subtheme totals for each factor chart to form an exhaustive list. The qualitative data expert and I agreed to only include subthemes in Round 2 if they panelists mentioned them eight or more times, after analyzing the statements given by panelists as an agreed consensus number (see Jordan & Javernick-Will, 2013). Finally, I considered subthemes totaling eight or more from the panel, and brought them forward to use for Round 2 analysis.

Analysis for factors that positively influence work for Round 1 yielded a total of 13 themes divided into 48 subthemes. For ease of discussion, Table 3 shows the shortened subthemes. Nine positive factor subthemes emerged totaling eight or more mentions: *open to others' ideas*, 23; *experience*, 18; *wisdom*, 13; *technologically savvy*, 13; *good communication*, 10; *mentoring*, 10; *sharing experiences*, 10; *willing to try new things*, 9; and *learning from others*, 8. Of the remaining 41 subthemes, 21 answers were mentioned only once, five answers were given twice, three answers were mentioned three times, seven subthemes were mentioned four times, one subtheme was given five times, and two subthemes were named six times. No subthemes were mentioned seven times. I brought a total of nine subthemes forward to Round 2 for analysis (see Table 3).

Table 3

*Positive Influence Factors*

Describe Factors that positively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	<i>Shortened subthemes</i>	Baby boomers	Generation X	Millennials	Total
Open	Being open to their ideas*	Open to others' ideas	18	4	1	23

Describe Factors that positively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>subthemes</i>	Baby boomers	Generation X	Millennials	Total
	Open to learning from others*	Learning from others	4	4		8
	Open to trying new things*	Willing to try new things	7	2		9
Communication	Good communication*	Good communication	3	5	2	10
	Recognition/Encouraging		3		1	4
	Being efficient		2			2
	Giving meaningful feedback		1			1
	Calmness		1			1
	Honesty		1			1
	Validating perspectives		1			1
	Face-to-face meetings		1			1
Respect	Respect for others		4			4
	Manners		2	2		4
	Tolerance of work habits		1			1
	Good people skills		1			1
Expertise knowledge	Having knowledge/wisdom*	Wisdom	7	3	3	13
	Having expertise/experience*	Experience	7	6	5	18
Technology	Being technology savvy*	Technologically savvy	8	3	2	13
Similarities	Similarities in practice		1			1
	Have same focus/ideals		1			1

Describe Factors that positively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	<i>Shortened subthemes</i>	Baby boomers	Generation X	Millennials	Total
	Common interests		1	4	1	6
Inspiration	Inspiring a buy in/ownership		3			3
	Command of situation		1			1
Motivation	Being motivated		3	1		4
	Energy		1	1	1	3
Mentoring	Being a mentor*	Mentoring	4	3	3	10
	Sharing experience*	Sharing experiences	3	3	4	10
	Being available		2	2		4
	Role modeling		1		1	2
	Approachable		1			1
	Supportive		1		1	2
	Helpfulness		1			1
Cooperation	Cooperation		2	3		5
	Putting others first		1			1
	Sense of family		1			1
	Friendships		2		1	3
	Teamwork			2		2
Shared Goals	Commitment		1			1
	Shared goals		1			1
	Work ethic			4	2	6
	Same faith			1		1
Diversity	Diversity		2	2		4
Character traits	Patient		2	2		4
	Reliable		2			2
	Creative		1			1
	Confidence		1			1
	Positivity		1			1
	Organization			1		1

*Note.* \*Subthemes that were mentioned eight or more times



Negative-influence factors yielded 14 themes and 59 subthemes. Panelists mentioned a total of seven subthemes eight or more times for factors that negatively influence work: *not willing to change*, 30; *close minded*, 28; *differences in communication*, 14; *different work ethic*, 12; *too focused on technology*, 11; *varied levels of expertise*, 9; and *different focus*, 8. In addition, the next open-ended question regarding biggest sources of conflict yielded six themes and 35 subthemes. Eight or more panelists names a total of six subthemes for biggest sources of conflict: *not willing to change*, 26; *different worth ethic*, 17; *not admitting when wrong*, 13; *expectations differ*, 12; *differences in communication*, 10; and *close minded*, 10 (see Tables 4 and 5).

Table 4

*Negative Influence Factors*

Describe factors that negatively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>subthemes</i>	Baby boomers	Generation X	Millennials	Total
Change	Not open to ideas*	close minded	12	9	7	28
	Not willing to change*	Not willing to change	9	16	5	30
	Too many ideas		2	3		5
	Not creative		1			1
	Opinionated		1		3	4
	Not willing to work on problems		1	3		4
Technology	Understanding/insight		2	4		6
	Too focused on technology*	Too focused on technology	7	1	4	11
	Not good with technology		1			1

Describe factors that negatively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>subthemes</i>	Baby boomers	Generation X	Millennials	Total
Communication	Preferences		2			2
	Differences in communication*	Differences in communication	12	1	1	14
	No people skills		1			1
	Not listening		5			5
	Gossip		1			1
	Assumptions		2	1	3	6
	Dishonesty		1			1
	Humor differences		1			1
Respect	No respect		3	1	2	6
	Negative feelings for others		1		3	4
Patience	Impatience		3	2		5
	Self-centered/selfish		6	1		7
Mentoring	Isolation		1			1
	Too dependent		1			1
	Won't mentor			3		3
	Lack of direction			1		1
	Territorial			1		1
Loyalty	Loyalty to program		2	1		3
	Time values		3	2		5
	Commitment		2	2		4
	Focus is different*	Different focus	1	4	3	8
Professionalism	Lack professionalism		2			2
	Collaboration issues		1			1
	Relationship with students		1	2	1	4

Describe factors that negatively influence your work with nursing faculty who are younger or older than you are						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>subthemes</i>	Baby boomers	Generation X	Millennials	Total
Work ethic	Work ethics*	Different work ethic	9	3		12
	Different expectations		3		2	5
	Flexibility		3	2		5
	Motivation		3			3
	Multitasking		1			1
	Competitive		3			3
	Bored		1			1
	Lazy		1	2	1	4
Knowledge	Experience levels*	Varied levels of expertise	8	1		9
	Knowledge levels			2		2
	Not up to date/current			3		3
	Overconfident			2		2
	Lacking organization			1		1
Collaboration	No sharing of ideas		3	2	1	6
	Mothering				1	1
Attitude	Anger		1			1
	Jealousy		1			1
	Emotional		1			1
	Illogical/irrational		1			1
	Arrogance		4			4
	Grumpy		1		1	2
	Bossy				1	1
	Not forgiving		2			2
Incivility	Incivility		2		3	5
Values	Values		2	1		3
	Different ethics		2			2

*Note.* \*Subthemes that were mentioned eight or more times

Table 5

*Biggest Sources of Conflict Factors*

What are the biggest sources of conflict that you encounter when working with faculty that are not in your age group?						
<i>Themes</i>	<i>Subthemes</i>	<i>Shortened subthemes</i>	Baby boomers	Generation X	Millennials	Total
Change	Not willing to change*	Not willing to change	11	10	5	26
	Close mindedness*	Close minded	8	2		10
	Won't admit when wrong*	Not admitting when wrong	6	5	2	13
	Quick to make decisions		2			2
	Too much change			1		1
Work ethic	Work ethic differences*	Differences in work ethic	9	8		17
	No responsibility		2	1		3
	Goals are different		5			5
	Expectations differ*	Expectations differ	7	4	1	12
	Commitment varies		2	3		5
	No dedication		2			2
	Not professional			1		1
Communication	Not listening		6			6
	Communication varies		2			1
	Differences in mode*	Differences in communication	6	3	1	10
	Perceptions differ		2			2
	Won't trust others			1	2	3
	No compromise			1		1

Attitude	Respect	3	1	3	7
	Assumptions and Stereotype	4	2		6
	Attitudes	1			1
	Immaturity	2			2
	Feeling “not fair”	2			2
	Personality conflicts	1			1
	Won’t help		1	1	2
	Controlling		1		1
	Won’t mentor			1	1
Technology	Differences	2	1	1	4
	Knowledge deficits	6			6
Traits	Home life is different	1			1
	Impatient		1	1	2
	Territorial		1		1
	Not creative		1		1
	Threatening		1	1	2
	Overworked		1		1

*Note.* \*Subthemes that were mentioned eight or more times

After examining negative influence factors and biggest sources of conflict, I gathered similar answers, or exact phrases from panelists for both questions. In addition, 13 subthemes emerged for both questions combined that panelists listed eight or more times. Of those subthemes, eight of 13 were exact or remarkably similar. Therefore, I combined the subthemes for negative influences and sources of conflict as nine factors brought forward for Round 2 dissemination and analysis (see Table 6).

Table 6

*Combination of Negative Influences and Biggest Sources of Conflict*

Factors that negatively influence your work with faculty not in your generational cohort = Negative influences		Biggest sources of conflict encountered with faculty not in your generational cohort = Conflict sources	
<i>Subthemes:</i>	Frequency	<i>Subthemes:</i>	Frequency
1. Not willing to change *	30	1. Not willing to change *	26
2. Not open to ideas * (close mindedness)	28	2. Work ethic differences *	17
3. Differences in communication *	14	3. Won't admit when wrong	13
4. Differences in work ethics *	12	4. Expectations differ	12
5. Too focused on technology	12	5. Differences in communication	10
6. Different experience levels	9	6. Close mindedness* (Not open to ideas)	10
7. Focus is different	8		
Final list of combined <i>subthemes</i> from negative influences and conflict sources			
<i>Subthemes</i>	Shortened <i>subthemes</i>		Frequency
1. Not willing to change	Not willing to change		56
2. Not open to ideas/close mindedness	Close minded		38
3. Differences in work ethics	Different work ethic		29
4. Differences in communication	Differences in communication		24
5. Won't admit when wrong	Not admitting when wrong		13
6. Too focused on technology	Too focused on technology		12
7. Expectations differ	Expectations differ		12
8. Different experience levels	Varied levels of expertise		9
9. Focus is different	Different focus		8

*Note.* \*Denotes repeated subtheme in negative influences and conflict sources

Last, I asked panelists to discuss factors that helped enhance teamwork with others who are older and factors that helped enhance teamwork with others who are younger. I made a factor-result table for each question. A total of eight themes and 37 subthemes emerged from panelist responses. Factors that helped in interactions with older faculty resulted in eight subthemes, named eight or more times: *sharing your experiences*,

23; knowledgeable, 21; positive communication, 15; team player, 11; open minded, 11; willing to help others learn, 10; mentoring, 9; and giving 100%, 8 (see Table 7).

Table 7

*Factors Help with Teamwork with Older Faculty*

What have you found in your interactions with others that are older than you are that have helped with teamwork?						
<i>Themes</i>	<i>Subthemes</i>	Shortened subthemes	Baby boomers	Generation X	Millennials	Total
Change	Open minded*	Open minded	7	3	1	11
	Willingness		2			2
	Curiosity		1			1
Knowledge	Shared past experiences*	Sharing your experiences	10	10	3	23
	Knowledge*	Knowledgeable	10	7	4	21
	Self-awareness		2			2
	Critical thinking		1			1
	Problem solving			2		2
Communication	Positive communication*	Positive communication	6	5	4	15
	Active listening		1	3	3	7
	Staying connected		1	1		2
	Candor		1			1
	Encouraging		3	3	1	7
	Recognizing strengths		1			1
	Welcoming		1		1	2
	Calmness		2	2		4
	Understanding			1		1
Mentorship	Sharing knowledge*	Willing to help others learn	8	2		10
	Feedback		1			1
	Helpfulness		5	1	1	7
	Mentoring		4	3	2	9
	Guidance		1	1		2
	Patience		3	3		6

What have you found in your interactions with others that are older than you are that have helped with teamwork?						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>subthemes</i>	Baby boomers	Generation X	Millennials	Total
Work ethic	Team player*	Team player	7	2	2	11
	Giving 100%*	Giving 100%	4	3	1	8
	Dependability		1	1		2
	Loyalty		1			1
	Dedication		1			1
	Commitment		1			1
	Clear deadlines		1			1
	Perseverance		1			1
	Democracy		1			1
	Frugality		1			1
	Organization			1		1
Respect	Respect		4	1	2	7
	Understanding beliefs/morals		1			1
	Kindness		3		2	5

*Note.* \*Subthemes that were mentioned eight or more times

I divided factors that helped in interactions with younger faculty into six themes and 39 subthemes. Panelists names a total of six subthemes eight or more times: *open minded*, 14; *listening*, 12; *technology literacy*, 12; *willing to learn*, 12; *enthusiasm*, 9; and *willing to help others learn*, 8 (see Table 8).

Table 8

*Factors Help with Teamwork with Younger Faculty*

What have you found in your interactions with others that are younger than you are that have helped with teamwork						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>Subthemes</i>	Baby Boomers	Generation X	Millennials	Total
Change	Open mind*	Open minded	10	4		14
	Bringing new ideas		2	4		6
	Willingness to change		5			5



What have you found in your interactions with others that are younger than you are that have helped with teamwork						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>Subthemes</i>	Baby Boomers	Generation X	Millennials	Total
	Creativity/Innovation		2	5		7
Knowledge	Willingness to help others learn*	Willing to help others learn	6	1	1	8
	Sharing knowledge		5	2		7
	Respect of knowledge		5	2		7
	Willingness to learn		8	1		9
Communication	Listening*	Active listening	10	1	1	12
	Patience		1	1		2
	Giving feedback		2	3		5
	Sharing communication styles		2	1	1	4
	Positive body language		1			1
	Encouraging		2			2
	Recognizing strengths		3	1		4
	Being honest		1			1
Technology	Technology literacy*	Technology literacy	7	4	1	12
Mentoring	Mentorship		4		1	5
	Asking for help		2			2
	Helping each other		4		1	5
	Mothering		1			1
	Support				1	1
Work ethic	Shared work		2	4	1	7
	Giving 100%		2	2		4
	Focus		1	2		3
	Strong willed		1			1
	Organization			2		2
	Deadlines			1		1
Respect	Respecting viewpoints		1	2		3
	Perspective		2			2

What have you found in your interactions with others that are younger than you are that have helped with teamwork						
<i>Themes</i>	<i>Subthemes</i>	Shortened <i>Subthemes</i>	Baby Boomers	Generation X	Millennials	Total
Engagement	Keeping engaged		1			1
	Being active		2			2
	Eagerness		1	1		2
	Rewards/recognition		1			1
	Enthusiasm*	Enthusiasm	6	3		9
	Having fun		4	1		5
	Similarities in personality		3			3
	Diversity		2			2
	Motivation			1		1

*Note.* \*Subthemes that were mentioned eight or more times

For both teamwork factor charts, older and younger, panelists named 14 subthemes eight or more times. In addition, four of the 14 subthemes were exact or remarkably similar. Therefore, I combined teamwork-collaboration strategies for older and younger generations as 12 factors for Round 2 dissemination and analysis (see Table 9).

Analysis from Round 1 identified a total of 30 factors: nine positive influences on collaboration, nine conflict/negative influences between generations, and 12 teamwork-collaboration strategies among multigenerational nursing faculty. As a result of Round 1 data, three factor groups moved forward to Round 2: positive collaboration strategies, conflict/negative influences, and teamwork collaboration.

Table 9

*Combination of Factors Helping with Teamwork for Older and Younger Faculty*

Factors helped with teamwork with generations that are older than you = Teamwork with Older Generations		Factors helped with teamwork with generations that are younger than you = Teamwork with Younger Generations	
<i>Subthemes:</i>	Frequency	<i>Subthemes:</i>	Frequency
1. Shared past experiences	23	1. Open mind *	14
2. Knowledge possession	21	2. Technology literacy	12
3. Positive communication	15	3. Active Listening	12
4. Team player	11	4. Willingness to learn	9
5. Open minded *	11	5. Enthusiasm	9
6. Sharing knowledge * (willingness to help others learn)	10	6. Willingness to help others learn * (Sharing knowledge)	8
7. Mentoring	9		
8. Giving 100%	8		
Final list of combined <i>Subthemes</i> from Teamwork with Older and Younger Generations			
<i>Subthemes</i>	Shortened <i>Subthemes</i>	Frequency	
1. Open mindedness	Open minded	25	
2. Shared past experiences	Sharing your experiences	23	
3. Possession of knowledge	Knowledgeable	21	
4. Sharing knowledge (willingness to help others learn)	Willing to help others learn	18	
5. Positive communication	Positive communication	15	
6. Technology literacy	Technology literacy	12	
7. Active listening	Active listening	12	
8. Team player	Team player	11	
9. Mentoring	Mentorship	9	
10. Willingness to learn	Willing to learn	9	
11. Enthusiasm	Enthusiasm	9	
12. Giving 100%	Giving 100%	8	

*Note.* \*Denotes repeated subtheme in teamwork

## Round 2 Factor Validation

I calculated the means for the 30 factors in each of the three factor groups: positive collaboration, conflict/negative influences, and teamwork collaboration. I calculated generational cohort means and cumulative mean scores for each factor. I used cumulative mean values to calculate a DCV score (aligned with Fehring, 1987; Wieck, 1996). I gave a DCV score to each factor by multiplying its mean by 0.10. I examined each factor by its mean level and assigned a DCV score, listed separately by generational cohort. I gave cumulative means for the three cohorts' combined means cumulative total DCV scores. DCV scores were major defining characteristics if their DCV > 0.80, minor descriptive items had DCV scores of 0.50 to 0.80 and discarded any items with DCV < 0.50 (as in Fehring, 1987; Wieck, 1996). All 30 factors had cumulative DCV values > 0.50, except the Millennial generation cohort had a DCV = 0.38 for the factor *different experiences and varied level of expertise* as a source of conflict and negative influences, considered a discarded factor for that generational cohort only.

### Positive Collaboration

I retained all positive collaboration influence factors as they received DCV scores ranging from 0.64 to 0.98. Eight of nine factors were major defining characteristics with DCV scores > 0.80 for the Baby Boomer cohort: *open to others' ideas, experience, wisdom, good communication, mentoring, sharing experiences, willing to try new things, and learning from others*. The one minor descriptive (> 0.50 to 0.80) for the Baby Boomers was *technologically savvy*. Generation X had six of nine major defining characteristics DCV (> 0.80): *open others' ideas, wisdom, good communication, willing to trying new things, and learning from others*. The three minor descriptives DCV (> 0.50

to 0.80) for Generation X included *expertise*, *technologically savvy*, *mentoring*, and *sharing experiences*. Millennials scored three of nine factors as major defining characteristics DCV > 0.80: *open to others' ideas*, *willing to try new things*, and *learning from others*. The remaining six minor descriptives DCV (> 0.50 to 0.80) included *expertise*, *wisdom*, *technologically savvy*, *mentoring*, and *sharing experiences*. As a cumulative group, eight of nine factors were major defining characteristics DCV > 0.80: *open to others' ideas*, *expertise*, *wisdom*, *good communication*, *mentoring*, *sharing experiences*, *willing to try new things*, and *learning from others*. The only minor descriptive DCV (0.71) was *technologically savvy*.

The highest DCV scores for positive collaboration influence across all cohorts and cumulatively was *good communication* with the DCV value in the range of 0.97 or 0.98. However, Baby Boomers and Generation X scored *technologically savvy* the lowest with DCV values of 0.67 and 0.75. In contrast, Millennials scored *expertise* lowest with a DCV value of 0.64 (see Table 10).

Table 10

*Positive Collaboration Strategies*

Factors- shortened	Generational cohorts															
	Baby boomers				Generation X				Millennials				Cumulative			
	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV
Open to the others' ideas	31	9.55	.850	.95	19	9.58	.607	.95	9	9.44	.882	.94	59	9.54	.773	.95
Expertise	31	8.71	1.131	.87	19	7.68	1.336	.76	9	6.44	2.351	.64	59	8.03	1.629	.80
Wisdom	31	8.71	1.006	.87	19	8.21	1.228	.82	9	7.33	2.915	.73	59	8.34	1.549	.83
Technologically savvy	31	7.52	1.338	.75	19	6.74	1.661	.67	9	6.89	2.261	.68	59	7.17	1.620	.71
Good Communication	31	9.77	.560	.97	19	9.74	.653	.97	9	9.89	.333	.98	59	9.78	.559	.97
Mentoring	31	9.13	1.284	.91	19	7.68	1.857	.76	9	7.67	3.122	.76	59	8.44	1.950	.84
Sharing experiences	31	8.58	1.148	.85	19	7.89	1.629	.78	9	7.11	1.965	.71	59	8.14	1.525	.81
Willing to try new things	31	9.48	.769	.94	19	9.47	.772	.94	9	8.89	.928	.88	59	9.39	.810	.93
Learning from others	31	9.45	.810	.94	19	9.53	.697	.95	9	9.11	.782	.91	59	9.42	.770	.94

Note. DCV = diagnostic content validity.

**Conflict and Negative Influences**

The conflict and negative-influence factors received DCV scores ranging from 0.38 to 0.94. The DCV value for *varied levels of expertise* for the Millennial cohort was 0.38, therefore I discarded this factor for Millennials. Three of nine factors scored as major defining characteristics with DCV scores > 0.80 for the Baby Boomer cohort: *close minded, not willing to change*, and *not admitting when wrong*. Baby Boomers scored six of nine factors as minor descriptives (.0.50 to 0.80): *differences in communication, different work ethic, too focused on technology, varied levels of expertise, different focus, and expectations differ*. Generation X scored four of nine major defining characteristics DCV > 0.80: *close minded, not willing to change*, and *not admitting when wrong*. The

five minor descriptives DCV (> 0.50 to 0.80) for Generation X included *different work ethic*, *too focused on technology*, *varied levels of expertise*, *different focus*, and *expectations differ*. Millennials scored five of nine factors as major defining characteristics DCV > 0.80: *close minded*, *willing to change*, *not admitting when wrong*, *differences in communication*, and *different work ethic*. The remaining four factors had one discarded: *varied levels of expertise*. I ranked the last three factors as minor descriptives: *too focused on technology*, *different focus*, and *expectations differ*. As a cumulative group, three of nine factors were major defining characteristics DCV (> 0.80): *close minded*, *not willing to change*, and *not admitting when wrong*. The minor descriptives had DCV scores > 0.50 to 0.80: *differences in communication*, *different work ethic*, *too focused on technology*, *varied levels of expertise*, *different focus*, and *expectations differ*.

Generation X scored *not willing to change* highest with a DCV score of 0.94. Baby Boomers scored *close minded* highest with a DCV score of 0.90. Millennials scored *close minded* and *not willing to change* as the highest with DCV scores of 0.90. Cumulatively, the generation cohorts ranked *close minded* highest with a DCV score of 0.91 (see Table 11).

Table 11

*Conflict and Negative Influences That Affect Collaboration*

Conflict and negative influences that affect collaboration																
Factors	Generational cohorts															
	Baby boomers				Generation X				Millennials				Cumulative			
	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV
Close minded	31	9.06	1.861	.90	19	9.37	.955	.93	9	9.00	1.118	.90	59	9.15	1.506	.91
Not willing to change	31	8.81	1.973	.88	19	9.42	.769	.94	9	9.00	1.414	.90	59	9.03	1.597	.90
Not admitting when wrong	31	8.32	2.227	.83	19	8.21	1.357	.82	9	8.11	1.269	.81	59	8.25	1.834	.82
Differences in communication	30	7.43	1.736	.74	19	8.00	1.202	.80	9	8.22	2.279	.82	58	7.74	1.681	.77
Different work ethic	30	7.83	1.783	.78	19	7.74	1.522	.77	9	8.33	1.871	.83	58	7.88	1.697	.78
Too focused on technology	30	7.07	2.050	.70	19	6.58	1.895	.65	9	7.11	2.848	.71	58	6.91	2.113	.69
Varied levels of expertise	30	5.53	2.403	.55	19	6.16	1.772	.61	9	3.89	2.667	.38	58	5.48	2.341	.54
Different focus	30	6.03	2.312	.60	19	6.21	1.843	.62	9	5.56	2.651	.55	58	6.02	2.196	.60
Expectations differ	30	7.60	1.545	.76	19	7.53	1.307	.75	9	7.78	1.093	.77	58	7.60	1.388	.76

Note. DCV = diagnostic content validity.

**Teamwork Collaboration**

Teamwork collaboration strategy factors were all retained as they received DCV scores ranging from 0.56 to 0.96. Nine of 12 factors were major defining characteristics with DCV scores > 0.80 for the Baby Boomer cohort including: *open minded, positive communication, team player, giving 100%, willing to learn, willing to help others learn, mentorship, active listening, and enthusiasm*. The three minor descriptives (> 0.50–0.80) for the Baby Boomers were *knowledgeable, sharing past experiences, and technology literacy*. Generation X had nine of 12 major defining characteristics DCV (> 0.80): *open*



*open minded, positive communication, team player, giving 100%, willing to learn, willing to help others learn, mentorship, active listening, and enthusiasm.* The remaining three factors were minor descriptives DCV ( $> 0.50$ – $0.80$ ) *knowledgeable, sharing past experiences, and technology literacy.* The Baby Boomers, Generation X, and the cumulative scores ranked the same nine of 12 factors as major characteristics: *open minded, positive communication, team player, giving 100%, willing to learn, willing to help others learn, mentorship, active listening, and enthusiasm.* In addition, Baby Boomers, Generation X, and cumulative DCV scores ranked *knowledgeable, sharing past experiences, and technology literacy* as minor descriptives. Millennials disagreed with Baby Boomers, Generation X, and the cumulative DCV scores in factor ranking between what were major defining characteristics and minor descriptives. Millennials scored seven of 12 factors as major defining characteristics: *open minded, positive communication, team player, willing to learn, willing to help others learn, active listening and enthusiasm* DCV ( $> 0.80$ ). The five minor descriptives were *knowledgeable, sharing past experiences, giving 100%, mentorship, and technology literacy* DCV ( $> 0.50$ – $0.80$ ).

For teamwork collaboration, the factor *open minded* had the highest DCV scores for Baby Boomers, Generation X, and cumulatively. The DCV scores for *open minded* among generational groups were as follows: Baby Boomers = 0.96, Generation X = 0.96, and cumulative = 0.95). Millennials ranked *willing to learn* DCV (0.95) the highest factor. All cohorts and cumulatively, *sharing past experiences* was the lowest scoring factor with DCV scores ranging from 0.56 to 0.77 (see Table 12).

Table 12

*Teamwork Collaboration*

Teamwork collaboration																
Generational cohorts																
Factors	Baby boomers				Generation X				Millennials				Cumulative			
	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV	<i>n</i>	Mean	<i>SD</i>	DCV
Open minded	30	9.63	.718	.96	19	9.63	.684	.96	9	9.00	.866	.90	58	9.53	.754	.95
Knowledgeable	30	7.70	1.208	.77	19	7.84	1.119	.78	9	7.11	2.088	.71	58	7.66	1.345	.76
Sharing past experiences	30	7.33	1.583	.73	19	7.53	1.264	.75	8	5.63	2.973	.56	57	7.16	1.820	.71
Positive communication	30	9.47	1.306	.94	19	9.53	.697	.95	8	9.13	2.100	.91	57	9.44	1.268	.94
Team player	30	9.40	1.003	.94	19	9.32	.820	.93	8	8.50	2.777	.85	57	9.25	1.340	.92
Giving 100%	30	8.83	1.147	.88	19	8.79	.855	.87	8	7.88	1.959	.78	57	8.68	1.227	.86
Willing to learn	30	9.53	.776	.95	19	9.42	.692	.94	8	9.50	.756	.95	57	9.49	.735	.94
Willing to help others learn	30	9.43	.774	.94	19	9.11	.994	.91	8	8.75	1.389	.87	57	9.23	.964	.92
Mentorship	30	9.00	1.438	.90	19	8.42	1.502	.84	8	7.63	2.925	.76	57	8.61	1.760	.86
Technology Literacy	30	7.40	1.303	.74	19	7.58	1.017	.75	8	6.38	1.302	.63	57	7.32	1.256	.73
Active listening	30	9.53	.776	.95	19	9.16	1.119	.91	8	9.25	.886	.92	57	9.37	.919	.93
Enthusiasm	30	8.50	1.526	.85	19	8.00	1.106	.80	8	8.13	.991	.81	57	8.28	1.333	.82

*Note.* DCV = diagnostic content validity.

**Top 3 Factors**

At the end of the Round 2 survey, I asked participants to rank their highest three factors for the corresponding factor group areas—positive collaboration, conflict/negative influences, and teamwork collaboration strategies—in a drag and drop format. Each participant was able to rank their choices as 1, 2, and 3 most important factors. For each of the 30 factors, the total number of times each generational group selected the factor was listed for 1, 2, and 3. I calculated the total of times panelists selected each factor in

the top three, and calculated percentages for the individual 1–3 choices and the total percentage the factor was chosen for each generational cohort and all groups together, as cumulative totals and percentages.

I calculated the total columns for percentage by taking the total number of panelists and multiplying that number by three, then dividing by the total number who selected that choice, to gain an accurate count of the total percentage. I multiplied the  $n$  values by three to calculate the total number of times panelists could have selected each factor. For example:

- There are 31 Baby Boomers in the cohort ( $n = 31$ ).
- 6 Baby Boomers ranked an *example factor* as 1                       $1 = 6$
- 8 ranked it as #2 and     $2 = 8$
- 2 ranked it as #3     $3 = 2$
- 16 Total Baby Boomers selecting *example factor*                       $= 16$
- To calculate total%( $n=31$ )     $31 \times 3 = 93$
- $16 \div 93 = 17.2\%$
- Therefore 17.2% of total Baby Boomers selected the *example factor* as their Top 3 choice.

### **Top 3 Positive-Collaboration Strategies**

The top three positive-collaboration strategies ranked as most important by Baby Boomers were *good communication*, *open to others' ideas*, and *learning from others*.

*Good communication* was the top choice for 23 Baby Boomers ( $n = 31$ ) ranking it in their highest 3 choices, totaling 24.7%. *Open to others' ideas* was ranked in the Top 3 for 21

Baby Boomers ( $n = 31$ ) totaling 22.5%. Last, 18 Baby Boomers ( $n = 31$ ) selected *learning from others*, totaling 19.3%.

Generation X selected the factors *good communication*, *open to others' ideas*, and *willing to try new things* as their overall highest choices. *Good communication* received the most votes for the highest three factors by 16 Generation X ( $n = 19$ ) panelists totaling 28%. *Open to others' ideas* received 14 votes as a Top 3 factor ( $n = 19$ ) for a total of 24.5%. Finally, 12 Generation X ( $n = 19$ ) selected *willing to try new things*, totaling 21%.

Millennials selected the factors *good communication*, *willing to try new things*, and tied for third place was *mentoring* and *learning from others*. *Good communication* received a total of seven votes in the highest three ( $n = 9$ ) totaling 25.9%. Five Millennials selected *willing to try new things* was in the Top 3 ( $n = 9$ ) totaling 18.5%. Last, four Millennials ranked *mentoring* or *learning from others* ( $n = 9$ ), totaling 14.8% of Millennials choosing this factor.

Cumulative totals of all the groups follow: 46 ( $n = 59$ ) or 25.9% chose *good communication*; 38 panelists ( $n = 59$ ) totaling 21.4% chose *open to others' ideas*; and 32 ( $n = 59$ ) totaling 18% selected *willing to try new things*. *Good communication* was the consistent factor across all generational cohorts as the factor ranked in the highest 3 most often. *Sharing experiences* was the only factor that no panelists ( $n = 59$ ) chose to rank in their highest three (see Table 13).

Table 13

*Top Three Positive Collaboration Strategies*

Top three positive collaboration strategies																	
Generation cohorts																	
		Baby boomers <i>N</i> = 31				Generation X <i>N</i> = 19				Millennials <i>N</i> = 9				All groups <i>N</i> = 59			
Factors		#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total
Open others' ideas	<i>n</i>	7	10	4	21	5	6	3	14	1	1	1	3	13	17	8	38
	%	22.5	32.2	12.9	22.5	8.7	10.5	5	24.5	3.7	3.7	3.7	11	22	28.8	13.5	21.4
Expertise	<i>n</i>	1	1	3	5	0	3	0	3	0	0	0	0	1	4	3	8
	%	3	3	14.2	5	0	5	0	5	0	0	0	0	1.6	6.7	5	4.5
Wisdom	<i>n</i>	1	2	2	5	0	1	3	4	0	0	2	2	1	3	7	11
	%	3	6	6	5	0	1	5	7	0	0	7	7	1.6	5	11.8	6
Technologically savvy	<i>n</i>	0	0	1	1	0	0	0	0	0	2	0	2	0	2	1	3
	%	0	0	3	1	0	0	0	0	0	7	0	7	0	3	1.6	1
Good communication	<i>n</i>	16	4	3	23	10	3	3	16	6	1	0	7	32	8	6	46
	%	51.6	12.9	14.2	24.7	17.5	5	5	28	22	3.7	0	25.9	54.2	13.5	10	25.9
Mentoring	<i>n</i>	0	3	2	5	1	0	1	2	2	2	0	4	3	5	3	11
	%	0	14.2	6	5	1	0	1	3.5	7	7	0	14.8	5	6.7	5	6
Sharing experiences	<i>n</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Willing to try new things	<i>n</i>	3	4	8	15	2	4	6	12	0	1	4	5	5	9	18	32
	%	14.2	12.9	25.8	16	3.5	7	10.5	21	0	3.7	14.8	18.5	6.7	15.2	30.5	18
Learning from others	<i>n</i>	3	7	8	18	1	2	3	6	0	2	2	4	4	11	13	28
	%	14.2	22.5	25.8	19.3	1	3.5	5	10.5	0	7	7	14.8	6.7	18.6	22	15.8

Note. \*Highlighting denotes the overall top 3 factors

**Top 3 Conflict/Negative Influences for Collaboration**

The highest three conflict/negative influences for collaboration ranked as most important by Baby Boomers were *close minded*, *not willing to change*, and *expectations differ*. *Close minded* was the top choice for 26 Baby Boomers (*n* = 31), ranking it in their highest three choices, which was a total of 27.9%. Baby Boomers ranked *not willing to*

*change* in the highest three ( $n = 31$ ) totaling 20%. Last, 15 Baby Boomers selected *expectations differ* ( $n = 31$ ) totaling 16.1%.

Generation X selected the factors *not willing to change*, *close minded*, and *expectations differ* as their overall top choices. *Not willing to change* received the most votes for the highest three factors by 16 Generation X ( $n = 19$ ) for a total of 24.5%. *Close minded* received 15 votes as a Top 3 factor ( $n = 19$ ) for a total of 26.3%. Finally, nine Generation X ( $n = 19$ ) selected *expectations differ*, totaling 15.7%.

Millennials selected the factors *close minded*, *not willing to change*, and tied for third place of the highest three factors were *differences in communication* and *expectations differ*. *Close minded* received a total of nine votes in the highest three ( $n = 9$ ) totaling 33%. Eight Millennials selected *not willing to change* in the highest three ( $n = 9$ ) totaling 29.6%. Last, three Millennials ranked *differences in communication* or *expectations differ* ( $n = 9$ ) totaling 11% of Millennials choosing this factor.

Cumulative totals of all the groups were as follows: 50 ( $n = 59$ ) or 28.2% chose *close minded*, 44 panelists selected *not willing to change* ( $n = 59$ ) totaling 24.8%, and 27 selected *expectations differ* ( $n = 32$ ), totaling 15.2%. Panelists did not agree as to which factor was the highest-rated choice. In addition, no Baby Boomers selected *too focused on technology* or *varied levels of expertise* as their top three choice. Of the nine factors, at least one panelist chose all as a Top 3 selection by Generation X and the Millennial cohorts (see Table 14).

Table 14

*Top Three Conflict/Negative Influences for Collaboration*

Top three conflict/negative influences for collaboration																	
Generation cohorts																	
		Baby boomers <i>N</i> = 31				Generation X <i>N</i> = 19				Millennials <i>N</i> = 9				All Groups <i>N</i> = 59			
Factors		#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total
Close minded	<i>n</i>	19	3	4	26	10	5	0	15	6	3	0	9	35	11	4	50
	%	61.2	9.6	12.9	27.9	52.6	26.3	0	26.3	66	33	0	33	59.3	18.6	6.7	28.2
Not willing to change	<i>n</i>	4	13	3	20	3	9	4	16	2	3	3	8	9	25	10	44
	%	12.9	41.9	9.6	21.5	15.7	47.3	21	28	22	33	33	29.6	15.2	42.3	16.9	24.8
Not admitting when wrong	<i>n</i>	1	4	7	12	1	2	3	6	0	1	1	2	2	7	11	20
	%	3.2	12.9	22.5	12.9	5	10.5	15.7	10.5	0	11	11	7.4	3.3	11.8	18.6	11.2
Differences in communication	<i>n</i>	4	2	2	8	1	1	2	4	1	2	0	3	6	5	4	15
	%	12.9	6.4	6.4	8.6	5	5	10.5	7	11	22	0	11	10	8.4	6.7	8.4
Different work ethic	<i>n</i>	1	2	4	7	1	0	1	2	0	0	0	0	2	2	5	9
	%	3.2	6.4	12.9	7.5	5	0	5	3.5	0	0	0	0	3.3	3.3	8.4	5
Too focused on technology	<i>n</i>	0	2	0	2	1	0	1	2	0	0	1	1	1	2	2	5
	%	0	6.4	0	2.1	5	0	5	3.5	0	0	11	3.7	1.6	3.3	3.3	2.8
Varied levels of expertise	<i>n</i>	0	0	0	0	1	0	1	2	0	0	0	0	1	0	1	2
	%	0	0	0	0	5	0	5	3.5	0	0	0	0	1.6	0	1.6	1
Different focus	<i>n</i>	0	0	0	0	1	0	0	1	0	0	1	1	1	0	1	2
	%	0	0	0	0	5	0	0	1.7	0	0	11	3.7	1.6	0	1.6	1%
Expectations differ	<i>n</i>	1	4	10	15	0	2	7	9	0	0	3	3	1	6	20	27
	%	3.2	12.9	32.2	16.1	0	10.5	36.8	15.7	0	0	33	11	1.6	10	33.8	15.2

Note. \*Highlighting denotes the overall top 3 factors

**Top 3 Teamwork-Collaboration Strategies**

The top three teamwork-collaboration strategies ranked as most important by Baby Boomers were *open minded*, *positive communication*, and *team player*. *Open minded* was the top choice for 23 Baby Boomers (*n* = 31), ranking it as their highest three choices, totaling 24.7%. Of Baby Boomers 16 ranked *positive communication* in the

highest three ( $n = 31$ ), totaling 17.2%. Last, 13 Baby Boomers selected *team player* ( $n = 31$ ) totaling 13.9%.

Generation X selected the factors *open minded*, *positive communication*, and *willing to learn* as their overall top choices. *Open minded* received the most votes for highest three factors by 14 Generation X ( $n = 19$ ) panelists totaling 24.5%. *Positive communication* received 10 votes as a Top 3 factor ( $n = 19$ ) for a total of 17.5%. Finally, nine Generation Xers selected *willing to learn* ( $n = 19$ ), totaling 15.7%.

Millennials selected the factors *open minded*, *positive communication*, and *team player*. *Open minded* received a total of six votes in the highest three ( $n = 9$ ), totaling 22.2%. Five Millennials selected *positive communication* among the highest three ( $n = 9$ ), totaling 18.5%. Last, four Millennials ranked *team player* ( $n = 9$ ) among the Top 3, totaling 14.8%.

Cumulative totals of all the groups follow: A total of 43 chose *open minded* ( $n = 59$ ) or 24.2%, 31 panelists selected *positive communication* ( $n = 59$ ), totaling 17.5%, and 23 selected *team player* ( $n = 59$ ), totaling 12.9%. *Open minded* was the consistent factor across all generational cohorts as the factor ranked in the highest three most often. *Technology literacy* was the only factor no panelists ( $n = 59$ ) chose to rank in their highest three. Generation Xers did not chose *sharing past experiences* or *technology literacy* in their Top 3. Millennials did not select *sharing past experiences*, *mentorship*, or *technology literacy* in their highest three (see Table 15).



Table 15

*Top Three Teamwork Strategies*

Top three teamwork strategies																	
Generation cohorts																	
		Baby boomers <i>N</i> = 31				Generation X <i>N</i> = 19				Millennials <i>N</i> = 9				All Groups <i>N</i> = 59			
Factors		#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total	#1	#2	#3	Total
Open minded	<i>n</i>	16	4	3	23	10	2	2	14	3	3	0	6	29	9	5	43
	%	51.6	12.9	9.6	24.7	52.6	10.5	10.5	24.5	33	33	0	22.2	49	15.2	8.4	24.2
Knowledgeable	<i>n</i>	0	1	0	1	0	1	0	1	0	1	0	1	0	3	0	3
	%	0	3	0	1	0	5	0	1.7	0	11	0	3.7	0	5	0	1.6
Sharing past experiences	<i>n</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
	%	0	0	3.2	1	0	0	0	0	0	0	0	0	0	0	1.6	0.5
Positive communication	<i>n</i>	6	8	2	16	3	6	1	10	3	1	1	5	12	15	4	31
	%	19.3	25.8	6.4	17.2	15.7	31.5	5	17.5	33	11	11	18.5	20.3	25.4	6.7	17.5
Team player	<i>n</i>	3	3	7	13	1	2	3	6	1	1	2	4	5	6	12	23
	%	9.6	9.6	22.5	13.9	5	10.5	15.7	10.5	11	11	22	14.8	8.4	10	20	12.9
Giving 100%	<i>n</i>	0	1	0	1	2	0	1	3	0	1	0	1	2	2	1	5
	%	0	3.2	0	1	10.5	0	5	5.2	0	11	0	3.7	3.3	3.3	1.6	2.8
Willing to learn	<i>n</i>	1	4	3	8	0	4	5	9	0	0	1	1	1	8	9	18
	%	3.2	12.9	9.6	8.6	0	21	26.3	15.7	0	0	11	3.7	1.6	13.5	15.2	10
Willing to help others	<i>n</i>	0	3	4	7	2	1	3	6	0	0	2	2	2	4	9	15
	%	0	9.6	12.9	7.5	10.5	5	15.7	10.5	0	0	22	7.4	3.3	6.7	15.2	8.4
Mentorship	<i>n</i>	1	1	3	5	1	1	2	4	0	0	0	0	2	2	5	9
	%	3.2	3.2	9.6	5.3	5	5	10.5	7	0	0	0	0	3.3	3.3	8.4	5
Technology literacy	<i>n</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Active listening	<i>n</i>	3	4	5	12	0	1	2	3	1	1	1	3	4	6	8	18
	%	9.6	12.9	16.1	12.9	0	5	10.5	5.2	11	11	11	11	6.7	10	13.5	10
Enthusiasm	<i>n</i>	0	1	2	3	0	1	0	1	0	0	1	1	0	2	3	5
	%	0	3.2	6.4	3.2	0	5	0	1.7	0	0	11	3.7	0	3.3	5	2.8

Note. \*Highlighting denotes top 3 choices

## **Summary**

In Chapter 4, I discussed the specific demographics and all the analysis of Rounds 1 and 2 of the Delphi study. I discussed the factor-identification process from the Round 1 qualitative data results of the five survey questions. Themes and subthemes derived during the factor-identification process leading to 30 final subthemes or factors. In addition, I condensed the Round 1 questions into three factor sets brought forward to Round 2 for dissemination. The highest three factors emerged in each of the three factor groups. I calculated and reported percentages for the highest three choices. Data analysis showed many similarities among generational cohorts, yet the emphasis and importance of factors among age groups varied among faculty.

## Chapter 5

### Discussion and Summary

Generations are shaped by influences including their families, spiritual beliefs, ethnic backgrounds, life events, experiences, and the circumstances surrounding them in society (Foley, Myrick, & Yonge, 2012). Although shared experiences link generational cohorts, differences in life lessons, habits, memories, communication styles, belief systems, and expectations pose challenges for individuals in different generational cohorts to positively collaborate, implement effective teamwork strategies, and avoid conflict and negative influences in the work setting.

### Theoretical-Model Summary

The generational-cycle model by Strauss and Howe (1991) described cyclical occurrences of events over generations or archetypes, serving as the theoretical basis for this study. Strauss and Howe assumed that conflict among generations is unavoidable. In this model, Baby Boomers were part of the archetype of profit with characteristics including values, religion, moralism, and the vision to resolve dilemmas (Gilburg, 2007). In Round 1, Baby Boomers listed subthemes *differences in values, ethics, and displaying dishonesty* as factors that negatively influence their work with others. In addition, Baby Boomers reported *respect, understanding beliefs/morals, kindness, and honesty* as traits that helped build teamwork.

Generation X is part of the archetype nomads with traits including independent, pragmatic, resolute, tough, and safeguarding the young (Gilburg, 2007). In Round 1, Generation X listed subthemes *being a mentor, sharing experience, and being available* as factors that help with positive collaboration. *Self-centered/selfish, won't mentor, work-ethic differences, no responsibility, and lack of direction* as factors that negatively impacted collaboration and contributed to conflict. Members of Generation X gave *shared past experiences, problem solving, encouraging, mentoring, guidance, giving 100%, giving feedback, and organization* as factors that help with teamwork.

Millennials belong to the archetype of hero with traits including affluence, technological abilities, challenging elders, and powerful ethics (Gilburg, 2007). In Round 1, Millennials listed the subtheme *being technologically savvy* as a positive influence in collaboration. *Too focused on technology, no respect, negative feelings for others, incivility, differences in technology, and threatening* are factors of negative influence that promote conflict.

Although the highest totaling subthemes selected by Baby Boomers were not those directly associated with values, religion, and morals, it is clear from the Round 1 qualitative answers that these traits are important to many of those in that generation. For Generation X, one of the biggest sources of conflict was work-ethic differences, which aligns with the Strauss and Howe (1991) belief that members of Generation X are pragmatic. In addition, a few ways Generation Xers may choose to safeguard their young are by encouraging, mentoring, giving feedback, and providing guidance; all factors Generation X listed as helpful in enhancing teamwork. Although Millennials mentioned technology savviness as a factor that positively affects collaboration, knowledge and

positive communication were the major teamwork strategies most important to Millennials, which does not coincide with the archetype hero traits. The Strauss and Howe (1991) generational-cycle model that predicts certain traits for generational archetypes (Wieck, Prydun, & Walsh, 2002). Although panelists of the generational archetypes named characteristics that influence positive collaboration, conflict and negative influences, and teamwork strategies for collaboration, panelists listed some factors that did not consistently align with the archetype traits listed by Strauss and Howe (1991).

### **Positive Collaboration Strategies**

Round 1 revealed the positive collaboration strategies related to being *open to others' ideas, learning from them, and willing to try new things*. For mentoring, *sharing experiences* and *mentoring* were important. The theme of expertise knowledge encompassed two subthemes: *wisdom* and *expertise*. *Good communication* was important for all generational cohorts. In Round 1, *technology savviness* was the fourth highest subtheme of nine subthemes, but in Round 2, *technology savviness* was considered a minor descriptor rather than a major defining characteristic.

The literature review revealed communication preferences varied among generations (Gibson, 2009; Hall, 2016; S. A. Johnson & Romanello, 2005; Rentz, 2015; Sherman, 2006). Although Baby Boomers prefer communication that is open, direct, and less formal, Millennials prefer immediate feedback. It was clear from the study that all generations value the subtheme of *good communication* as important to positive collaboration (Hall, 2016; Sherman, 2006; Tapscott, 2009). When individual faculty members are willing to be cognizant of the preferences of various generation's

communication preferences, the ability to improve collaboration increases. What is considered *good communication* varies by generation. When faculty implement the positive collaboration strategy of *good communication* across generational lines, the potential exists to improve perspectives, thereby enhancing outcomes. Understanding perspectives in the workplace is key to improving outcomes (Coulter & Faulkner, 2014).

The most common theme of positive influences was “open.” The largest subtheme from positive influences for Baby Boomers was *open to others’ ideas*. Generation X and the Millennials most common theme mentioned was “expertise knowledge” and they mentioned their most common subtheme of *expertise*. Although the Baby Boomers agreed with the theme and subtheme, not as many Baby Boomers selected *expertise*.

Round 2 quantitative data analysis included mean values, standard deviations, and DCV values for all factors, divided by generational cohorts and totaled cumulatively. For positive collaboration strategies, the highest DCV score was for the factor *good communication* across all cohorts and cumulatively. In addition, major defining characteristics for positive collaboration agreed on by all cohorts were *open to others’ ideas*, *willing to try new things*, and *learning from others*. *Sharing experiences*, *mentoring*, and *expertise* were minor descriptives for Generation X and Millennials, although the Baby Boomers ranked the same factors as major defining characteristics. All generation cohorts agreed being *technologically savvy* was a minor descriptive and ranked it as the lowest scoring factor by DCV score.

Generational cohorts disagreed as to which positive collaboration strategies were the Top 3 factors. Although all cohorts agreed *good communication* should be among the highest three, Baby Boomers chose *open to others’ ideas* and *learning from others*,

whereas members of Generation X chose *willing to try new things* and *open to others' ideas*, and Millennials chose *mentoring*, *willing to try new things*, and *open to others' ideas*.

### **Conflict and Negative Influences**

Negative outcomes such as decreased productivity, increased turnover, decreased program satisfaction, and increased stress levels directly related to incivility and intolerance of generational differences (Clark & Springer, 2007; Coulter & Faulkner, 2014; Luparell, 2007). Tension and conflict permeated every facet of nursing (Santos & Cox, 2000). Deeply rooted differences among generations cause faculty to have difficulty offsetting them and achieving successful collaboration (Rentz, 2015).

Round 1 of this study revealed that negative influences and conflict related to change: *close minded*, *not willing to change*, and *not admitting when wrong*. *Different work ethic* and *expectations differ* were negative influences. Technology issues were *too focused on technology*; knowledge issues were *varied levels of experience*; and finally, communication problems surfaced as *differences in communication*, all considered sources of conflict. However, only three Baby Boomers mentioned *motivation* as a source of conflict/negative influence.

The literature reported Baby Boomers are more committed to the workplace, had higher job-satisfaction ratings, and were less emotional than their younger peers (Blythe et al., 2008). In addition, Generation Xers reported higher levels of job dissatisfaction than did Baby Boomers, citing a perception of less civil workplaces and team incivility (Leiter et al., 2010). Perhaps the subthemes reported in this Delphi study, including

*different work ethic, differing expectations, and differences in communication*, are sources for higher levels of job dissatisfaction in the Generation X cohort.

In Round 2, although for the negative influence factors the subtheme *not willing to change* was the highest totaling factor and the highest listed for Generation X, the generational cohorts of Baby Boomers and Millennials listed *close minded* most often. Across the board, for biggest sources of conflict, *change* was the greatest theme, with *not willing to change* being cited most often by all generational cohorts. I combined conflict and negative influences, bringing forth nine factors for Round 2.

I discarded one factor for conflict and negative influences in the Millennial group: *varied levels of expertise*. In fact, it was the lowest scoring factor for the Baby Boomers and Generation X and scored as a minor descriptive. All cohorts agreed *close minded, not willing to change*, and *not admitting when wrong* were major defining characteristics. Millennials felt *differences in communication* and *different work ethics* were major defining characteristics. Generation X only agreed with the Millennials that *differences in communication* was another major defining characteristic.

The top three negative influences were similar because the generational cohorts agreed on the factors, but the total percentage each cohort ranked the factors varied. *Close minded, not willing to change*, and *expectations differ* were in the top three of all cohorts. Baby Boomers selected *close minded* most, Generation X picked *not admitting when wrong*, and Millennials chose *close minded* as their top pick of highest three. Millennials had their third choice tied between *expectations differ* and *differences in communication*.



## Teamwork Collaboration

Teamwork strategies for older faculty varied between generational cohorts. Baby Boomers cited *sharing past experiences* and *knowledgeable* most often. Generation X cited *sharing past experiences* most commonly. The major subthemes Millennials listed for helping with teamwork with older faculty were *knowledgeable* and *positive communication*. Regarding teamwork factors that help with younger faculty, Baby Boomers listed *open minded* and *listening* as most common. Generation X listed *creativity/innovation* as their best strategy. Millennials named only a few subthemes, all listed equally such as *willing to help others learn*, *listening*, *sharing communication styles*, *technology literacy*, *mentorship*, *helping each other*, *support*, and *shared work*. I combined teamwork strategies for older and younger faculty, bringing forward 12 subtheme factors for Round 2.

Major defining characteristics for teamwork collaboration by all generational cohorts were *open minded*, *positive communication*, *team player*, *willing to learn*, *willing to help others learn*, *active listening*, and *enthusiasm*. Baby Boomers and Generation X also felt *giving 100%*, and *mentorship* were major defining characteristics of teamwork collaboration, although Millennials felt they were minor descriptives. All cohorts agreed *sharing past experiences with your colleagues* was lowest scoring. *Technology literacy* and *knowledgeable* were minor descriptives across cohorts.

The Top 2 teamwork strategies were the same for all generational cohorts and cumulatively, with *open minded* rated highest, and *positive communication* rated second. Baby Boomers, Millennials, and the cumulative total ranked *team player* as the third factor. However, Generation Xers thought *willing to learn* was the third highest factor.

No panelists chose *technology literacy* among the highest three choices, ranking it as the lowest priority of the highest three teamwork strategies.

### **Technology Summary**

Participants consistently mentioned the technological impact of diversity among generations as a factor that separates and defines differences among generational cohorts. Panelists considered Millennials to be the most technologically savvy group, Generation X to be technologically literate, and Baby Boomers to consider technology satisfying yet inessential (Earle & Myrick, 2009; Rentz, 2015; Tolbize, 2008). Before the Delphi study, I hypothesized that technology would negatively impact collaboration, as previous researchers consistently described variations and problems with technology implementation among generations.

This study's results differed from earlier studies regarding the impact of technology in multigenerational collaboration. In Round 1, concerning positive collaboration, participants mentioned being *technologically savvy* only 13 times as a factor that improves collaboration. Regarding conflict, only one panelist mentioned *not being good* with technology. In contrast, 11 mentioned *being too focused* on technology and 12 panelists listed *understanding/insight* and *knowledge deficits* in technology as a source of conflict. For teamwork, seven Baby Boomers, four Generation Xers, and only one Millennial identified *technology literacy* as an aid to teamwork. With a study size of 84 panelists in Round 1, these numbers are small in comparison to the entire group.

For positive collaboration, Round 2 DCV scores across generational cohorts for being *technologically savvy* were consistently lower than most other subthemes and *technologically savvy* was only a minor descriptive. *Too focused on technology* again

ranked lower in DCV scoring as a minor descriptive across generations regarding sources of conflict. Finally, *technology literacy* in teamwork collaboration was a minor descriptive across generational cohorts, and DCV scores were significantly lower than other teamwork factors.

Although the literature and my hypothesis that technology impacts generations negatively because of differences, the Delphi panel disagreed with the level of the importance and significance of technology. This finding is an important discovery and addition to the literature. Although the literature points to differences in technology savviness, implementation, and importance to nursing faculty, panelists in this Delphi study did not consistently report or rate perceptions of technology impacting collaboration positively, negatively impacting collaboration, or improving teamwork. This discovery offers insight into the actual perceptions of nursing faculty in the education setting, bringing into question whether technology truly impacts the workplace as highly as discussed in the extant literature.

### **Strengths and Limitations**

This study had many strengths including economy and efficiency, effectiveness, and flexibility in design (aligned with de Loe, 1995). The Delphi method allowed me to provide an analysis and interaction from a large group of nursing faculty from the State of Texas. Paneling a sample of experienced nursing faculty from 30% of randomly selected schools provided the chance to efficiently gain insight into the thoughts of a large portion of nursing faculty in the state. This study was effective because panelists had time to think about the survey questions and were not pressured into completing the survey quickly; thus, they were able to reconsider their ideas and amend them before

submission, as necessary. The Delphi method allowed me to be flexible and implement the survey in a unique way. The Round 1 and Round 2 surveys demonstrated consistency among generational cohort groups, thereby strengthening the findings. In addition, this Delphi study could be repeated in other states or schools, replicating and strengthening the results.

Limitations for the Delphi method included two rounds of surveys that required extensive time. The information was difficult to assimilate, and the large survey response was difficult to categorize and align qualitative themes and subthemes for Round 1. Optimally, group size should be between 10 and 50 panelists (Turoff, 1975). The large expert panel size of 84 panelists in Round 1 allowed for higher reliability because the panelist experts were able to come to agreement and consensus with the factors (as in Keeney et al., 2011).

Although the overall goal for Round 1 was 75 participants, with each generational cohort group number at 25, the end totals did not reach those goals for all generational cohort groups. The small number of Millennials available to meet inclusion criteria resulted in only 12 panelists from Round 1, comprising only 14% of the panel. Baby Boomer participation was largest with 45 participants comprising 54% of the panelist group. Generation X met the generational cohort goal with 27 panelists, representing 32% of total participants. I allowed for several weeks before finalizing Round 1 data collection and sent multiple reminder e-mails to program coordinators or deans to ensure adequate expert-panel participation and final generational cohort size.

Attrition rates between rounds in a Delphi survey can be problematic; however, the Round 1 to Round 2 attrition rate was only 29%, decreasing from 84 panelists to 59

panelists. Expected problems in Delphi methodology are attrition rates expected to be 50% (Gary, 2014). It was clear I expected the decrease in participation, but the decrease in panelists did not cause detrimental effects to the study. In fact, each generational cohort group was represented similarly in Rounds 1 and 2. The end percentages for the generational cohorts went from 54% Baby Boomers in Round 1 to 53% Baby Boomers in Round 2. Generation X stayed the same, comprising 32% of panelists in Rounds 1 and 2. Millennials were represented 14% of the panelists in Round 1, and 15% of the panelists in Round 2.

Delphi methodology challenges include perception biases and generalizability challenges (Keeney et al., 2001). Perception bias or desirability bias may have existed as generational cohorts may have answered questions to provide a positive outlook on their generation or they may have been reluctant to share their weaknesses to avoid being critical of their own cohort. However, expert panelists did not meet one another in a qualitative study-group setting or see the answers provided on the original Round 1 data sheets, eliminating the possibility of group bias. Researcher bias may have emerged in observing the patterns in the Round 1 qualitative data. As a generalizability challenge, I may have misinterpreted or not clearly understood the meaning of responses of participants and thus not labeled themes and subthemes as intended by the panelists. Using another qualitative-research expert to review the raw data and conventional content analysis from Round 1 decreased this bias.

### **Implications**

This study revealed several benefits including its contribution to improving relationships, lessening conflict, and building teamwork among nursing faculty in the

academic setting. With an alarming one third of the current nursing faculty workforce retiring by 2025, combined with a 7.9% faculty vacancy rate, and 75,029 qualified nursing-program applicants being turned away due to insufficient faculty, improving the relationship among faculty in the educational setting is crucial (American Association of Colleges of Nursing, 2019).

Prior to completion of this Delphi study, the review of literature revealed four themes that varied among generational cohorts: communication, work style, ethics, and motivation. Researchers said those themes influenced whether successful multigenerational collaboration would occur, or friction would result. It was clear that the theme of change—*close minded*, and *not willing to change*—was the biggest factor that affected conflict/negative influence among all generational cohorts. The themes that resulted from this study that most often positively influenced collaboration was *good communication* and being open: *open to others' ideas*, *willing to try new things*, and *learning from others*. Last, themes that help with teamwork collaboration are *open-minded* and *willing to learn*, and for communication, *positive communication* and *active listening*. Using these discovered themes in the nursing-faculty setting to improve collaboration and teamwork and decrease conflict and negative influences may help with overall multigenerational collaboration.

This study has the potential to affect how nursing faculty interact and to improve understanding of the perceptions of peers in generational cohorts that differ from their own. Rather than looking at generational cohort differences, nursing faculty can achieve common ground by examining and understanding themes common among the generations. Improving multigenerational faculty interactions has the potential to attract

new faculty to nursing programs and retain existing faculty in the academic setting. In addition, identifying differences among generations can be the impetus for conversations among faculty members on strategies that enhance positive collaboration and teamwork, and factors that increase conflict and negative outcomes. When faculty model successful positive collaboration, teamwork, and conflict resolution, they augment the potential to improve student collaboration strategies. Direct observation of faculty instructors implementing successful strategies for collaboration has the potential to impact students' interactions with their peers and patients.

Although in this Delphi study I directly aimed to improve multigenerational collaboration in nursing faculty, the results imply the ability to improve faculty relations in the general academic setting. The revealed strategies for positive collaboration, teamwork, and conflict influences are not specific to nurses alone. Implications for the applied usage of themes/subthemes in general academia or a general work setting with a multigenerational workforce have the same potential benefits to improve collaboration as in a nursing-faculty setting. Identified themes and strategies are broad and applicable to an array of professions and individuals.

### **Recommendations**

The results of this study support a couple of recommendations. First, replication of this study in other states would be helpful in determining if findings correlate throughout the country. In addition, I recommend implementing the generated 30-item factor list in a faculty setting to determine if these factors improved collaboration and teamwork and decreased conflict and negative influences in a multigenerational nursing-

faculty setting. It would be helpful to know which strategies were most effective and which ones were considered least effective when implemented.

The goal is to improve multigenerational collaboration in the faculty setting, improve overall teamwork, and limit the amount of conflict and negative influence, thereby improving student outcomes with a functioning cohesive faculty unit. In addition, implemented factors could improve faculty-partnership settings and potentially impact attrition rates for nursing faculty in the academic setting. The last recommendation is to produce a white paper to explore solutions and outline recommendations for multigenerational-collaboration strategies at the faculty level.

### **Conclusions**

Providing positive collaboration and effective teamwork and minimizing conflict/negative influences in a multigenerational nursing faculty setting is important in meeting the diverse needs of individuals working in nursing education. Although Delphi studies do not necessarily ensure they yield the correct answers, expert panelists can identify and agree on items (Keeney et al., 2005).

This Delphi study resulted in identifying 30 factors that multigenerational nursing faculty believe either influence positive collaboration and teamwork, or negatively influence or are sources of conflict in the workplace. Clearly, the impact of factors, positive and negative, are not the same for all generational cohorts, and the importance of factors varies greatly among generations. Some factors, although common among generational cohorts and deemed worthy of mention by panelists, did not have the same impact across the generations. Understanding these differences when working in a multigenerational nursing-faculty setting will clearly impact the workplace and open



communication among a multigenerational faculty to improve the educational workplace in nursing education.

## References

- American Association of Colleges of Nursing. (2019). *Nursing shortage*. Retrieved from <https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Shortage>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24, 452–471. <https://doi.org/10.2307/259136>
- Apostolidis, B. M., & Polifroni, E. C. (2006). Nurse work satisfaction and generational differences. *Journal of Nursing Administration*, 36, 506–509. <https://doi.org/10.1097/00005110-200611000-00003>
- Baker, P., & Moon, N. W. (2008). Wireless technologies and accessibility for people with disabilities: Findings from a policy research instrument. *Assistive Technology*, 20, 149–156. <https://doi.org/10.1080/10400435.2008.10131942>
- Barry, M. (2014). Creating a practice environment that supports multigenerational workforce collaboration. *American Nurse*, 46(1), 13. Retrieved from <http://www.theamericannurse.org>
- Barutcu, C. D., & Ergin, S. (2017). Examination of professional commitment and stress management among nurses from different generations. *International Journal of Caring Sciences*, 10, 456–463. Retrieved from <http://www.internationaljournalofcaringsciences.org>
- Bavier, A. R. (2016). Faculty role: A choice of styles. *Nursing Education Perspectives*, 37, 59. <https://doi.org/10.1097/01.NEP.0000480027.46297.22>
- Bennett, M. (2017). A formal introduction to the five generations of employees in your workforce. Retrieved from <https://www.jdsupra.com/legalnews/a-formal-introduction-to-the-five-11484/>
- Berk, R. A. (2013). Multigenerational diversity in the academic workplace: Implications for practice. *Journal of Higher Education Management*, 28(1), 10–23. [http://www.ronberk.com/articles/2013\\_diversity.pdf](http://www.ronberk.com/articles/2013_diversity.pdf)
- Blackwood, B., Albarran, J. W., & Latour, J. M. (2010). Research priorities of adult intensive care nurses in 20 European countries: A Delphi study. *Journal of Advanced Nursing*, 67, 550–562. <https://doi.org/10.1111/j.1365-2648.2010.05512.x>

Blythe, J., Baumann, A., Zeytinoglu, I. U., Denton, M., Akhtar-Danesh, N., Davies, S., & Kolotylo, C. (2008). Nursing generations in the contemporary workplace. *Public Personnel Management*, 37, 137–159. <https://doi.org/10.1177/009102600803700201>

Brady, S. R. (2015). Utilizing and adapting the Delphi method for use in qualitative research. *International Journal of Qualitative Methods*, 14(5), 1–6. <https://doi.org/10.1177/1609406915621381>

Buhler, P. (2007). Managing in the new millennium. *Supervision*, 68(7), 20.

Caza, B. B., & Cortina, L. M. (2007). From insult to injury: Explaining the impact of incivility. *Basic and Applied Social Psychology*, 29, 335–350. <https://doi.org/10.1080/01973530701665108>

Clark, C. M. (2010). From incivility to civility: Transforming the culture. *Reflections on Nursing Leadership*, 36(3), 2. Retrieved from <https://www.reflectionsonnursingleadership.org>

Clark, C. M., & Springer, P. J. (2007). Incivility in nursing education: A descriptive study of definitions and prevalence. *Journal of Nursing Education*, 46, 7–14. Retrieved from <https://www.healio.com/nursing/journals/jne>

Clark, K. R. (2017). Managing multiple generations in the workplace. *Radiologic Technology*, 88, 379–396. Retrieved from <http://www.radiologictechnology.org>

Coates, J. (2007). *Generational learning styles*. River Falls, WI, US: Learning Resources Network Books.

Collins, D. E., & Tilson, E. R. (2000). Profiling the Generation x learner. *Radiologic Technology*, 73, 581–584. Retrieved from <http://www.radiologictechnology.org>

Corbo, S. A. (1997). The X-er files. *Hospitals & Health Networks*, 71(7), 58–60. Retrieved from <https://www.hhnmag.com>

Cortina, L. M., Magley, V. J., Williams, J., & Langhout, R. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, 6, 64–80. <https://doi.org/10.1037/1076-8998.6.1.64>

Coulter, J. S., & Faulkner, D. C. (2014). Case management matters: The multigenerational workforce. *Professional Case Management*, 19, 46–51. Retrieved from <https://journals.lww.com/professionalcasemanagementjournal>

Custer, R. L., Scarcella, J. A., & Stewart, B. R. (1999). The modified Delphi technique—A rotational modification. *Journal of Career and Technical Education*, 15(2), 1–10. Retrieved from <https://ejournals.lib.vt.edu/JCTE>

Day, J., & Bobeva, M. (2005). A generic toolkit for the successful management of Delphi studies. *Electronic Journal of Business Research Methods*, 3, 103–117. Retrieved from <http://www.ejbrm.com/main.html>

De Gagne, J. C., Yamane, S. S., & Conklin, J. L. (2016). Evidence-based strategies to create a culture of cybercivility in health professions education. *Nurse Education Today*, 45, 138–141. <https://doi.org/10.1016/j.nedt.2016.07.007>

de Loe, R. C. (1995). Exploring complex policy questions using the policy Delphi: A multi-round, interactive survey method. *Applied Geography*, 15(1), 53–56. [https://doi.org/10.1016/0143-6228\(95\)91062-3](https://doi.org/10.1016/0143-6228(95)91062-3)

Denaro, L., Giorgi, G., Sderci, F., & Perez, J. F. (2018). Age power: Work engagement in different generations. *Quality—Access to Success*, 19(166), 145–150. Retrieved from <https://www.srac.ro/calitatea>

Earle, V., & Myrick, F. (2009). Nursing pedagogies and the intergenerational discourse. *Journal of Nursing Education*, 48, 624–630. <https://doi.org/10.3928/01484834-20090716-08>

Fang, D., & Bednash, G. D. (2014). Attrition of full-time faculty from schools of nursing with baccalaureate and graduate programs, 2010 to 2011. *Nursing Outlook*, 62, 164–173. <https://doi.org/10.1016/j.outlook.2013.12.002>

Fang, D., & Kesten, K. (2017). Retirements and succession of nursing faculty in 2016–2017. *Nursing Outlook*, 65, 633–642. <https://doi.org/10.1016/j.outlook.2017.03.003>

Farrell, G. A. (2001). From tall poppies to squashed weeds: Why don't nurses pull together more? *Journal of Advanced Nursing*, 35, 26–33. <https://doi.org/10.1046/j.1365-2648.2001.01802.x>

Fehring, R. (1987). Methods to validate nursing diagnoses. *Heart and Lung*, 16, 625–629. Retrieved from <https://www.heartandlung.org>

Felblinger, D. M. (2009). Bullying, incivility, and disruptive behaviors in the healthcare setting: Identification, impact, and intervention. *Frontiers of Health Services Management*, 25(40), 13–23. <https://doi.org/10.1097/01974520-200904000-00003>

Ferres, N., Travaglione, A., & Firms, I. (2003). Attitudinal differences between generation-X and older employees. *International Journal of Organizational Behaviour*, 6, 320–333.

Florence Nightingale Pledge. (1985). *Journal of Holistic Nursing*, 3(1), 18. <https://doi.org/10.1177/089801018500300105>

Foley, V. C. (2011). *The preceptorship experience in the intergenerational context: a phenomenological study* (Unpublished doctoral dissertation). University of Alberta, Edmonton, Alberta.

Foley, V., Myrick, F., & Yonge, O. (2012). Intergenerational conflict in nursing preceptorship. *Nurse Education Today*, 33, 1003–1007. <https://doi.org/10.1016/j.nedt.2012.07.019>

Gardner, S., & Johnson, P. R. (2001). The learner, meaner workplace: Strategies for handling bullies at work. *Employment Relations Today*, 28(2), 23–26. <https://doi.org/10.1002/ert.1012>

Gary, J. C. (2014). The wicked question answered. *Dimensions of Critical Care Nursing*, 33, 142–150. <https://doi.org/10.1097/DCC.0000000000000038>

Gibson, S. E. (2009). Intergenerational communication in the classroom: Recommendations for successful teacher-student relationships. *Nursing Education Perspectives*, 30, 37–39. <https://doi.org/10.1043/1536-5026-030.001.0037>

Gilburg, D. (2007). Empowering multigenerational collaboration in the workplace. *Systems Thinker*, 18(4), 2–7. Retrieved from <https://thesystemsthinker.com>

Glendinning, P. M. (2001). Workplace bullying: Curing the cancer of the American workplace. *Public Personnel Management*, 30, 269–286. <https://doi.org/10.1177/009102600103000301>

Graystone, R. (2019). How to build a positive, multigenerational workforce. *JONA: The Journal of Nursing Administration*, 49(1), 4-5. <https://doi.org/10.1097/NNA.00000000000000698>

Gurchiek, K. (2016). What motivates your workers? It depends on their generation. Retrieved from <https://www.shrm.org/resourcesandtools/hr-topics/behavioral-competencies/global-and-cultural-effectiveness/pages/what-motivates-your-workers-it-depends-on-their-generation.aspx>

Hall, A. (2016). Exploring the workplace communication preferences of millennials. *Journal of Organizational Culture, Communications and Conflict*, 20(1), 35–44. Retrieved from <https://www.abacademies.org>

Hatfield, S. L. (2002). Understanding the four generations to enhance workplace management. *AFP Exchange*, 22(4), 72–74. Retrieved from <https://www.afponline.org>

Harding, A. D. (2011). Multigenerational workforce: Are we using the literature effectively? *Journal of Emergency Nursing*, 37, 75–76. <https://doi.org/10.1016/j.jen.2010.05.007>

Hornstein, H. (2003). Workplace incivility: An unavoidable product of human nature and organizational nurturing. *Ivey Business Journal*, 68(2), 1–7. Retrieved from <https://iveybusinessjournal.com>

Howe, N., & Strauss, W. (2000). *Millennials rising. The next great generation*. New York, NY, US: Vintage Books.

Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. <https://doi.org/10.1177/1049732305276687>

Hsu, C., & Sanford, B. A. (2007). Minimizing non-response in the Delphi process: How to respond to non-response. *Practical Assessment, Research & Evaluation* 12(17), 1–6. Retrieved from <https://pareonline.net>

Iqbal, S., & Pilon-Young, L. (2009). The Delphi method. *Psychologist*, 22, 598–600. Retrieved from <https://thepsychologist.bps.org.uk>

Irvine, D. (2010). How to reward a multigenerational and culturally diverse workforce. *WorkSpan*, 4(10), 6268.

Jobe, L. (2014). Generational differences in work ethic among 3 generations of registered nurses. *Journal of Nursing Administration*, 44, 303–308. <https://doi.org/10.1097/NNA.0000000000000071>

Johnson, P., & Indvik, J. (2001). Rudeness at work: Impulse over restraint. *Public Personnel Management*, 30, 457–465. <https://doi.org/10.1177/009102600103000403>

Johnson, S. A., & Romanello, M. L. (2005). Generational diversity: Teaching and learning approaches. *Nurse Educator*, 30, 212–216. <https://doi.org/10.1097/00006223-200509000-00009>

Jordan, E., & Javernick-Will, A. (2013). Indicators of community recovery: Content analysis and Delphi approach. *Natural Hazards Review*, 14(1), 21–28. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000087](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000087)

Keene, D. L., & Hendrich, R. R. (2010). Tattoos, tolerance, technology, and TMI: Welcome to the land of the Millennials. *Jury Expert*, 22(4), 33–46. Retrieved from <https://www.thejuryexpert.com>

Keeney, S., Hasson, F., & McKenna, H. (2001). A critical review of the Delphi technique as a research methodology for nursing. *International Journal of Nursing Studies*, 38, 195–200. [https://doi.org/10.1016/s0020-7489\(00\)00044-4](https://doi.org/10.1016/s0020-7489(00)00044-4)

Keeney, S., Hasson, F., & McKenna, H. (2005). Consulting the oracle: Ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing*, 53, 205–212. <https://doi.org/10.1111/j.1365-2648.2006.003716.x>

Keeney, S., Hasson, F., & McKenna, H. (2011). *The Delphi Technique in Nursing and Health Research*. Oxford, England: John Wiley & Sons.

Keil, M., Lee, H. K., & Deng, T. (2013). Understanding the most critical skills for managing IT projects: A Delphi study of IT project managers. *Information & Management*, 50, 398–414. <https://doi.org/10.1016/j.im.2013.05.005>

Kelan, E. K. (2014). Organizing generations—What can sociology offer to the understanding of generations at work? *Sociology Compass*, 8, 20–30. <https://doi.org/10.1111/soc4.12117>

Krail, K. A. (2005). Retaining the retiring nurse. *Nurse Leader*, 3(2), 33–36. <https://doi.org/10.1016/j.mnl.2005.01.005>

Lancaster, L. C., & Stillman, D. (2005). *When generations collide*. New York, NY: Collins Business.

Leiter, M. P., Price, S. L., & Spence Lashinger, H. K. (2010). Generational differences in distress, attitudes and incivility among nurses. *Journal of Nursing Management*, 18, 970–980. <https://doi.org/10.1111/j.1365-2834.2010.01168.x>

Li, Y., Kennedy, K., & Fang, D. (2019). *Special survey on vacant faculty positions for academic year 2017–2018*. Retrieved from <http://www.aacnnursing.org/Portals/42/News/Surveys-Data/vacancy17.pdf>

Linstone, H. A., & Turoff, M. (2002). *The Delphi method: Techniques and applications*. Retrieved December 10, 2017, from <https://web.njit.edu/~turoff/pubs/delphibook/delphibook.pdf>

Litchfield, J. M., & Matteis, M. (2016). Faculty experiences with technology, millennials versus baby boomers. *Online Journal of Nursing Informatics*, 20(1), 6–10. Retrieved from <https://www.himss.org/ojni>

Luparell, S. (2004). Faculty encounters with uncivil nursing students: An overview. *Journal of Professional Nursing*, 20, 59–67. <https://doi.org/10.1016/j.profnurs.2003.12.007>

Luparell, S. (2007). The effects of student incivility on nursing faculty. *Journal of Nursing Education*, 46, 15–19. <https://doi.org/10.1016/j.jne.2007.01.005>

Mangold, K. (2007). Educating a new generation: Teaching baby boomer faculty about millennial students. *Nurse Educator*, 32, 21–23.

Marchiondo, K., Marchiondo, L. A., & Lasiter, S. (2010). Faculty incivility: Effects on program satisfaction of BSN students. *Journal of Nursing Education*, 49, 608–614. <https://doi.org/10.3928/01484834-20100524-05>

McCarthy, A. (2016). How to train a multi-generational workforce. *Training*, 53(3), 14. Retrieved from <https://trainingmag.com>

McCune, J. C. (2000). Civility counts. *Management Review*, 89(3), 6.

McGlynn, A. P. (2005). Teaching millennials: Our newest cultural cohort. *Hispanic Outlook in Higher Education*, 16, 19–20. Available from ERIC database. (EJ741200)

McNally, K. (2017). Leading a multigenerational workforce. *Healthcare Executive*, 32(1), 58–61. Retrieved from <https://healthcareexecutive.org>

Meilink, L. A., & Grimes, C. (2015). Designs for the ages. *Health Facilities Management*, 28(7), 30–33. Retrieved from <https://www.hfmmagazine.com>

Meriac, J., Woehr, D. J., & Banister, C. (2010). Generational differences in work ethic: An examination of measurement equivalence across three cohorts. *Journal of Business and Psychology*, 25, 315–324. <https://doi.org/10.1007/s10869-010-9164-7>

Merriam-Webster's Dictionary and Thesaurus. (2014). Springfield, MA: Merriam-Webster.

Minnis, B. W. (2004). *Variables that contribute to the recruitment and retention strategies for Generation X nurses* (Doctoral dissertation) Available from ProQuest Dissertations and Theses database. (AAI No. 3150354).

Mohr, N. M., Moreno-Walton, L., Mills, A.M., Brunett, P. H., & Promes, S. B. (2011). Generational influences in academic emergency medicine: Teaching and learning, mentoring, and technology (Part I). *Academic Emergency Medicine*, 18, 190–199. <https://doi.org/10.1111/j.1553-2712.2010.00985.x>

Moore, J., Everly, M., & Bauer, R. (2016). Multigenerational challenges: Team building for positive clinical workforce outcomes. *Online Journal of Issues in Nursing* 21, 3. <https://doi.org/10.3912/OJIN.Vol21No02Man03>

National Advisory Council on Nurse Education and Practice. (2010). The impact of the nursing faculty shortage on nurse education and practice: Ninth annual report. Retrieved from <https://www.hrsa.gov/advisorycommittees/bhpradvisory/nacnep/Reports/ninthreport.pdf>



Okoli, C., & Pawlowski, S. (2004). The Delphi method as a research tool: An example, design, considerations, and applications. *Information & Management*, 42, 15–29. <https://doi.org/10.1016/j.im.2003.11.002>

Palese, A., Pantali, G., & Saiani, L. (2006). The management of a multigenerational nursing team with differing qualifications: A qualitative study. *Health Care Manager*, 25, 173–183. <https://doi.org/10.1097/00126450-200604000-00011>

Pardue, K. T., & Morgan, P. (2008). Millennials considered: A new generation, new approaches, and implications for nursing education. *Nursing Education Perspectives*, 29, 74–79. <https://doi.org/10.1097/00024776-200803000-00007>

Pearson, C. M., Andersson, L., & Porath, C. L. (2000). Assessing and attacking workplace incivility. *Organizational Dynamics*, 29(2), 123–137. [https://doi.org/10.1016/S0090-2616\(00\)00019-X](https://doi.org/10.1016/S0090-2616(00)00019-X)

Pearson, C. M., & Porath, C. L. (2005). On the nature, consequences, and remedies of workplace incivility: No time for “nice?” Think again. *Academy of Management Executive*, 19(1), 7–18. <https://doi.org/10.5465/ame.2005.15841946>

Portney, L. G., & Watkins, M. P. (2015). *Foundations of clinical research applications to practice* (3rd ed.). Philadelphia, PA: F.A. Davis.

Price, S., McGillis Hall, L., Angus, J., & Peter, E. (2013). The social context of career choice among millennial nurses: Implications for interprofessional practice. *Journal of Interprofessional Care*, 27, 509–514. <https://doi.org/10.3109/13561820.2013.816660>

Proserpio, L., & Gioia, D. A. (2007). Teaching the virtual generation. *Academy of Management Learning & Education*, 6, 69–74. <https://doi.org/10.5465/amle.2007.24401703>

Raines, C. (2003). *Connecting generations: The sourcebook for a new workplace*. Menlo Park, CA: Crisp.

Rentz, K. C. (2015). Beyond the generational stereotypes: A study of U.S. Generation Y employees in context. *Business and Professional Communication Quarterly*, 78, 136–166. <https://doi.org/10.1177/2329490615576183>

Rowe, G., & Frewer, L. J. (2005). A typology of public engagement mechanisms. *Science, Technology & Human Values*, 30, 251–290. <https://doi.org/10.1177/0162243904271724>

Rowe, M. M., & Sherlock, H. (2005). Stress and verbal abuse in nursing: Do burned out nurses eat their young? *Journal of Nursing Management*, 17, 288–293. <https://doi.org/10.1111/j.1365-2834.2004.00533.x>

- Sacks, D. (2006). Scenes from the culture clash. *Fast Company*, 1, 73–77. Retrieved from <https://www.fastcompany.com>
- Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations*, 56, 1213–1232. <https://doi.org/10.1177/00187267035610003>
- Santos, S. R., & Cox, K. (2000). Workplace adjustment and intergenerational differences between matures, boomers, and xers. *Nursing Economic\$,* 18, 7–13. Retrieved from <http://www.nursingeconomics.net>
- Schullery, N. M. (2013). Workplace engagement and generational differences in values. *Business Communication Quarterly*, 76, 252–265. <https://doi.org/10.1177/1080569913476543>
- Sedrak, M., & Cahill, T. F. (2011). Age-related conflicts: The generational divide. *Health Progress*, 7, 31–35. Retrieved from <https://www.chausa.org>
- Settles, I. H., Cortina, L. M., Malley, J., & Stewart, A. J. (2006). The climate for women in academic science: The good, the bad, and the changeable. *Psychology of Women Quarterly*, 30, 47–58. <https://doi.org/10.1111/j.1471-6402.2006.00261.x>
- Sherman, R. (2006). Leading a multigenerational nursing workforce: Issues, challenges and strategies. *Online Journal of Issues in Nursing*, 11(2), 2. <https://doi.org/10.3912/OJIN.Vol11No02Man02>
- Simons, N. (2010). Leveraging generational work styles to meet business objectives. *Information Management Journal*, 44(1), 28–29, 31–33. Retrieved from <https://trove.nla.gov.au>
- Sirias, D., Karp, H. B., & Brotherton, T. (2007). Comparing the levels of individualism/collectivism between baby boomers and Generation X: Implications for teamwork. *Management Research News*, 30, 749–761. <https://doi.org/10.1108/01409170710823467>
- Skiba, D. J. (2005). The millennials: Have they arrived at your school of nursing? *Nursing Education Perspectives*, 25, 370–371. Retrieved from <http://www.nln.org>
- Skiba, D., & Barton, A. (2006). Adapting your teaching to accommodate the net generation of learners. *Online Journal of Issues in Nursing*, 11(2), 4. <https://doi.org/10.3912/OJIN.Vol11No02Man04>
- Smith, T., & Nichols, T. (2015). Understanding the millennial generation. *Journal of Business Diversity*, 15(1), 39–47. Retrieved from <http://www.na-businesspress.com>

Sofer, D. (2018). Nurses pass the baton: Exit baby boomers, enter millennials. *American Journal of Nursing*, 118(2), 17–18. <https://doi.org/10.1097/01.NAJ.0000530237.91521.ee>

Stanley, D. (2010). Multigenerational workforce issues and their implications for leadership in nursing. *Journal of Nursing Management*, 18, 846–852. <https://doi.org/10.1111/j.1365-2834.2010.01158.x>

Stanley, M. J., & Dougherty, J. P. (2010). A paradigm shift in nursing education: A new model. *Nursing Education Perspectives*, 31, 378–380. <https://doi.org/10.1043/1536-5026-31.6.378>

Strauss, W., & Howe, N. (1991). *Generations. The history of America's future, 1584 to 2069*. New York, NY: William Morrow.

Takase, M., Oba, K., & Yamashita, N. (2009). Generational differences in factors influencing job turnover among Japanese nurses: An exploratory comparative design. *International Journal of Nursing Studies*, 46, 957–967. <https://doi.org/10.1016/j.ijnurstu.2007.10.013>

Tapscott, D. (2009). *Grown up digital: How the net generation is changing your world*. Boston, MA: McGraw Hill.

Taylor, S. T. (2018). Law firms step up to meet the challenges and reap the rewards. *Of Counsel: The Legal Practice and Management Report*, 37(8), 15–18. Retrieved from <https://lrus.wolterskluwer.com>

Thomas, S. P., & Burk, R. (2009). Junior nursing students' experiences of vertical violence during clinical rotations. *Nursing Outlook*, 57, 226–231. <https://doi.org/10.1016/j.outlook.2008.08.004>

Tolbize, A. (2008). *Generational differences in the workplace*. University of Minnesota Research and Training Center on Community Living. Retrieved from [https://rtc.umn.edu/docs/2\\_18\\_Gen\\_diff\\_workplace.pdf](https://rtc.umn.edu/docs/2_18_Gen_diff_workplace.pdf)

Turoff, M. (1975). The mechanics of a policy Delphi. In H. A. Linstone & M. Turoff (Eds.), *The Delphi method: Techniques and applications* (pp. 84–100). Reading, MA: Addison-Wesley.

Twenge, J. M., & Campbell, S. M. (2008). Generational differences in psychological traits and their impact on the workplace. *Journal of Managerial Psychology*, 23, 862–877. <https://doi.org/10.1108/02683940810904367>

Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36, 1117–1142. <https://doi.org/10.1177/0149206309352246>

Walker, J. T., Martin, T., White, J., Elliott, R., Norwood, A., Mangun, C., & Haynie, L. (2006). Generational (age) differences in nursing student's preferences for teaching methods. *Journal of Nursing Education*, 45, 371–374. Retrieved from <https://www.healio.com/nursing/journals/jne>

Weston, M. (2001). Coaching generations in the workplace. *Nursing Administration Quarterly*, 25(2), 11–21. Retrieved from <https://journals.lww.com/naq/journa>

Weston, M. (2006). Integrating generational perspectives in nursing. *Online Journal of Issues in Nursing*, 11(2), 1. <https://doi.org/10.3912/OJIN.Vol11No02Man01>

Widger, K., Pye, C., Cranley, L., Squires, M., & Tourangeau, A. (2007). Generational differences in acute care nurses. *Nursing Leadership*, 20(1), 49–61. Retrieved from <https://www.longwoods.com/publications/nursing-leadership>

Wieck, K. L. (1996). Diagnostic language consistency among multicultural English-speaking nurses. *Nursing Diagnosis*, 7(2), 70–78. <https://doi.org/10.1111/j.1744-618X.1996.tb00295.x>

Wieck, K. L. (2005). Generational approaches to current nursing issues: How younger and older nurses can coexist. *Oklahoma Nurse* 50(1), 16-19.

Wieck, K. L., Dols, J., & Northam, S. (2009). What nurses want: The nurse incentives project. *Nursing Economics*, 27, 169–177, 201. Retrieved from <http://www.nursingeconomics.net>

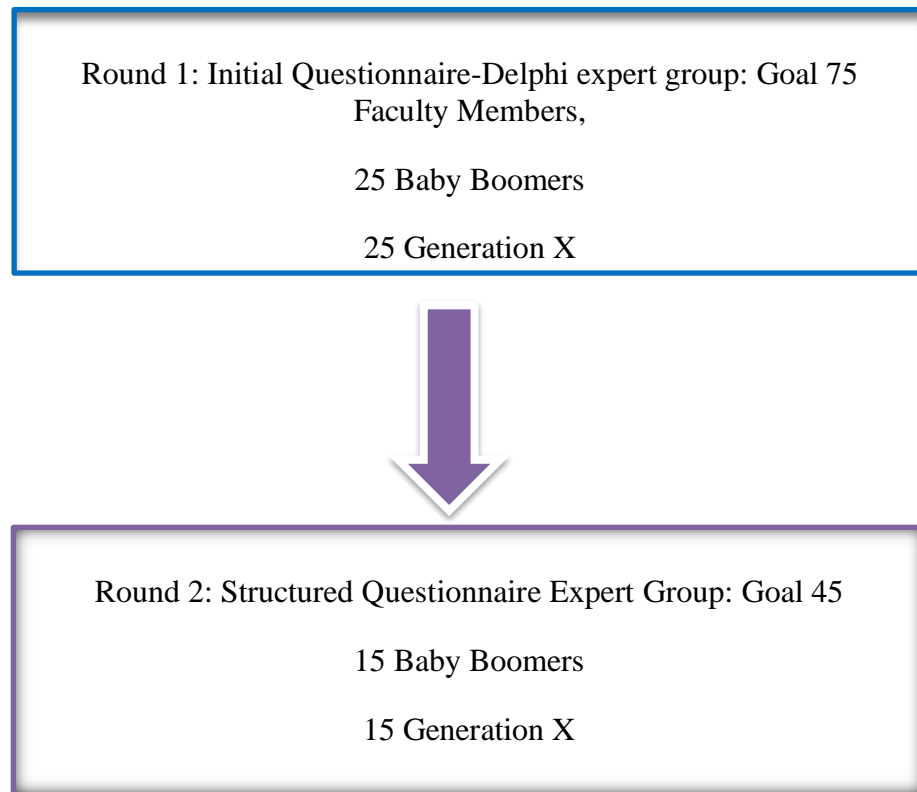
Wieck, K. L., Prydun, M., & Walshe, T. (2002). What the emerging workforce wants in its leaders. *Journal of Nursing Scholarship*, 34, 283–288. <https://doi.org/10.1111/j.1547-5069.2002.00283.x>

Woelfle, C. Y., & McCaffrey, R. (2007). Nurse on nurse. *Nursing Forum*, 42(3), 123–131. <https://doi.org/10.1111/j.1744-6198.2007.00076.x>

Worley, K. (2011). Educating college students of the net generation. *Adult Learning*, 22(3), 31–39. <https://doi.org/10.1177/104515951102200305>

Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work: Managing the clash of veterans, boomers, xers, and nexters in your workplace*. New York, NY: Amacom.

## Appendix A: Theoretical Framework: Delphi Technique



Based on Keeney, S., Hasson, F., & McKenna's, H. (2001) A critical review of the Delphi technique as a research methodology for nursing. *International Journal of Nursing Studies*, 38(2), 195-200.

## Appendix B: Initial Letter to Program Coordinator/Dean

--Date--

Dear Dean \_\_\_\_\_,

I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler and I am seeking your help. I am looking for participation by your faculty members in a research study that will identify successful multigenerational collaboration strategies. One reason this is important to you is that it will contribute to solving some of the problems associated with multigenerational collaboration in nursing education. This research is being supervised by Dr. Danita Alfred and has met IRB approval from the University of Texas at Tyler.

Your participation in disseminating this information will help me to gather valuable data from generational cohorts around Texas, in turn identifying key factors that influence tolerance among generations versus friction. I know you must understand how difficult it can be to collaborate and lead a multigenerational faculty. I look forward to sharing the results of this study, and possibly improve interactions among nursing faculty.

I am asking you to please disseminate the enclosed attachment to your nursing faculty. If they choose to collaborate with the study, it will entail their completion of a short survey on three separate occasions, requiring less than 15 minutes of their time. You are also welcome to participate. All information obtained will remain confidential and no identifying information will be shared with others or will be named in the study. There is no compensation for participation in this study, however individuals can opt into a random drawing to receive a \$100 AMAZON® gift card at the end of the survey. I am so excited about your program's potential contribution to this study. Thank you for your time, attention, and consideration. Again, if you would like to participate yourself, I would love to receive your feedback and input.

If you have any questions, please feel free to contact me or my dissertation chair via email or via phone.

Sincerely,

Heather M Fowler, PhD(c), RN, CNE

Heather M. Fowler, PhD Candidate, RN, CNE

Doctoral Student at the University of Texas at Tyler

Phone (915)256-3654

Email- [hfowler@patriots.uttyler.edu](mailto:hfowler@patriots.uttyler.edu)

Danita Alfred, PhD, RN (Dissertation Chair)  
College of Nursing  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Phone- (903)566-7019  
Email- [dalfred@uttyler.edu](mailto:dalfred@uttyler.edu)

## Appendix C: Initial Participant Invitation—Round 1

--Date--

Dear Nursing Faculty Member,

I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler and I am seeking your help. You have been invited to participate in a research study that will identify successful intergenerational collaboration strategies among nursing faculty. One reason this is important to you is that it will contribute to solving some of the problems associated with faculty intergenerational collaboration in nursing education. This research is being supervised by Dr. Danita Alfred and has met IRB approval from the University of Texas at Tyler.

Your participation will help to identify key factors that improve tolerance or promote friction among generations. Participation will include completion of a short survey on three separate occasions, requiring less than 15 minutes of your time for each. To participate in this study, please click on the link provided below. You will be directed to the Informed Consent page. After you consent to participate, you will be taken to the survey. We know of no known risks to this study, other than becoming a little tired while answering questions. All identifiable information obtained in this study will be kept confidential and will not be shared with anyone.

In addition, you may opt to be entered in to a random drawing to win a \$100 AMAZON® gift card at the end of the survey. I am so excited about your potential contribution to this study. Thank you for your time, attention, and consideration. If you have any questions about this study, please feel free to contact me via email or via phone.

[https://uttyler.az1.qualtrics.com/jfe/form/SV\\_54Qvwq29mGgtgLH](https://uttyler.az1.qualtrics.com/jfe/form/SV_54Qvwq29mGgtgLH)

Sincerely,

Heather M Fowler, MSN, RN, CNE

Heather M. Fowler, PhD Candidate, RN, CNE

Doctoral Student at the University of Texas at Tyler

Phone (915)256-3654

Email- [hfowler@patriots.uttyler.edu](mailto:hfowler@patriots.uttyler.edu)

Danita Alfred, PhD, RN (Dissertation Chair)

College of Nursing

The University of Texas at Tyler

3900 University Blvd.

Tyler, TX 75799

Phone- (903)566-7019

Email- [dalfred@uttyler.edu](mailto:dalfred@uttyler.edu)



## Appendix D: Demographic and Round 1 Survey/Questions

### Demographics:

1. Are you currently a licensed registered nurse in the United States?  
Yes  
No
2. How long have you been teaching at your institution?  
\_\_\_\_\_years(s)\_\_\_\_\_month(s)
3. What type of program are you currently teaching in?  
Associate Degree  
Bachelor's Degree  
Other (specify)\_\_\_\_\_
4. Do you work full time or part time?  
Fulltime  
Part time
5. What primary position do you hold at your institution?  
Dean  
Program Coordinator  
Team Leader  
Lecturer  
Clinical Staff  
Lab Instructor  
Other (specify)\_\_\_\_\_
6. Do you currently have a direct student/teaching assignment?  
Yes  
No

Appendix D: Demographic and Round 1 Survey/Questions (continued)

7. What generational cohort do you belong to?

Silent Generation—Born 1925–1945 \_\_\_\_\_

Baby Boomer—Born 1946–1964 \_\_\_\_\_

Generation X—Born 1965–1981 \_\_\_\_\_

Millennial—Born 1982–1999 \_\_\_\_\_

8. What is your age?

\_\_\_\_\_

9. What is your gender?

Male

Female

10. Highest nursing degree held:

Diploma

Associate Degree

Bachelor's Degree

Master's Degree

Doctoral Degree

**Round 1 Questions:**

1. Describe some specific factors you have found that positively influence your work with nursing faculty who are not in your generational cohort, they are either younger or older than you are:
  
  
  
  
  
2. Describe some factors that have negatively influenced your work with nursing faculty, not in your generational cohort, who are younger or older than you are:
  
  
  
  
  
3. What are the biggest sources of conflict that you encounter when working with faculty that are not in your generational age group cohort?

Appendix D: Demographic and Round 1 Survey/Questions (continued)

4. What have you found in your interactions with others that are older than you (in another generational cohort) or 15-20 years older that have helped with teamwork?
  
5. What have you found in your interactions with others that are younger than you, (in another generational cohort) or 15-20 years younger have helped with teamwork?

Please enter your email address:\_\_\_\_\_

Would you like to be entered into the drawing for a \$100 Amazon® gift card?

Yes\_\_\_\_\_ No\_\_\_\_\_

## Appendix E: Participant Instructions—Round 2

--Date--

Dear Delphi Participant,

Hello again. My name is Heather Fowler and as you know I am a doctoral candidate in the College of Nursing at the University of Texas at Tyler. First, I want to thank you for participating in round one of my research study sent out last spring/summer 2018. There was a tremendous response for the round one portion of the study from faculty around Texas representing all the generational cohorts including the Silent Generation, Baby Boomers, Generation X, and Millennials. After gathering and synthesizing all the qualitative data from your answers in the questionnaire, I was able to condense the collection to two rounds.

Your participation is needed for this last round of data for a modified Delphi study. This study will identify successful intergenerational collaboration strategies among nursing faculty. This is important because it will contribute to solving some of the problems associated with intergenerational collaboration in nursing education. Your participation will help identify key factors that contribute to tolerance or friction among generational cohorts.

Please click on the link below to complete the second and final survey. Your input is important. Thank you in advance for your participation and completion of the survey.

[https://uttyler.az1.qualtrics.com/jfe/form/SV\\_4UdPJhHJBCrechT](https://uttyler.az1.qualtrics.com/jfe/form/SV_4UdPJhHJBCrechT)

In addition, you may opt to enter a random drawing for a \$100 AMAZON gift card at the end of the survey. I am so excited to see the results, and sincerely thank you for your time, attention, and consideration.

Sincerely,

Heather M. Fowler, MSN, RN, CNE

Heather M. Fowler, PhD Candidate, RN, CNE  
Doctoral Student at the University of Texas at Tyler  
Phone (915)256-3654  
Email- [hfowler@patriots.uttyler.edu](mailto:hfowler@patriots.uttyler.edu)

Danita Alfred, PhD, RN (Dissertation Chair)  
College of Nursing-The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Phone-(903)566-7019  
Email- [dalfred@uttyler.edu](mailto:dalfred@uttyler.edu)

## Appendix F: Reminder E-mail for Millennial Panelist

--Date--

Dear Millennial Delphi Participant,

I need your help to represent your generational cohort. Unfortunately, there are not many Millennials in the nursing faculty setting, therefore, to represent your cohort affectively in the study, I need your help answering the round 2 questionnaire. Round two will be the final round of the modified Delphi study.

This is important because it will contribute to solving some of the problems associated with intergenerational collaboration in nursing education. Your participation will help identify key factors that contribute to tolerance or friction among generational cohorts.

Please click on the link below to complete the second and final survey. Your input is important. Thank you in advance for your participation and completion of the survey.

[https://uttyler.az1.qualtrics.com/jfe/form/SV\\_4UdPJhHJBCrechT](https://uttyler.az1.qualtrics.com/jfe/form/SV_4UdPJhHJBCrechT)

In addition, you may opt to enter a random drawing for a \$100 AMAZON gift card at the end of the survey. I am so excited to see the results, and sincerely thank you for your time, attention, and consideration.

Sincerely,

Heather M. Fowler, MSN, RN, CNE

Heather M. Fowler, PhD Candidate, RN, CNE  
Doctoral Student at the University of Texas at Tyler  
Phone (915)256-3654  
Email- [hfowler@patriots.uttyler.edu](mailto:hfowler@patriots.uttyler.edu)

Danita Alfred, PhD, RN (Dissertation Chair)  
College of Nursing-The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Phone-(903)566-7019  
Email- [dalfred@uttyler.edu](mailto:dalfred@uttyler.edu)

## Appendix G. Institutional Review Board Approval—University of Texas at Tyler



THE UNIVERSITY OF TEXAS AT TYLER  
3900 University Blvd. • Tyler, TX 75799 • 903.565.5774 • FAX: 903.565.5858

Office of Research and  
Technology Transfer

Institutional Review Board

April 23, 2018

Dear Ms. Fowler,

Your request to conduct the study: *Understanding Multigenerational Nurse Faculty Collaboration Strategies: A Policy Delphi Study*, IRB #SP2018-129 has been approved by The University of Texas at Tyler Institutional Review Board under expedited review. This approval includes the use of signed informed consent, and your assurance of participant knowledge of the following prior to study participation: this is a research study; participation is completely voluntary with no obligations to continue participating, and with no adverse consequences for non-participation; and assurance of confidentiality of their data.

In addition, please ensure that any research assistants are knowledgeable about research ethics and confidentiality, and any co-investigators have completed human protection training within the past three years, and have forwarded their certificates to the IRB office (G. Duke).

**Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:**

- This approval is for one year, as of the date of the approval letter
- **The Progress Report form must be completed for projects extending past one year.** Your protocol will automatically expire on the one year anniversary of this letter if a Progress Report is not submitted, per HHS Regulations **prior** to that date (45 CFR 46.108(b) and 109(e): <http://www.hhs.gov/ohrp/policy/contrev0107.html>)
- Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity
- **Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others**

EQUAL OPPORTUNITY EMPLOYER

Appendix G. Institutional Review Board Approval-University of Texas at Tyler

(continued)

- Suspension or termination of approval may be done if there is evidence of any serious or continuing noncompliance with Federal Regulations or any aberrations in original proposal.
- Any change in proposal procedures must be promptly reported to the IRB prior to implementing any changes except when necessary to eliminate apparent immediate hazards to the subject.
- Expedited approval with signed consent

Best of luck in your research, and do not hesitate to contact me if you need any further assistance.

Sincerely,



Gloria Duke, PhD, RN  
Chair, UT Tyler IRB

EQUAL OPPORTUNITY EMPLOYER

## Appendix H. Institutional Review Board Approval—Tyler Junior College



THE COLLEGE OF EAST TEXAS

May 2, 2018

Heather M. Fowler  
University of Texas at Tyler  
[hfowler@patriots.uttyler.edu](mailto:hfowler@patriots.uttyler.edu)

Study Title: Understanding Multigenerational Nurse Faculty Collaboration Strategies: A Policy Delphi Study

Protocol #: 2018-02 IRB  
Approval Type: Expedited  
Approval Date: May 2, 2018

Dear Ms. Fowler,

In accordance with Federal Regulations for review of research protocols, the Institutional Review Board – Human Subjects (IRB-HS) of Tyler Junior College has reviewed your study as requested.

Responsibilities of the Principal Investigators include:

- Inform the IRB-HS in writing immediately of any emergent problems or proposed changes.
- Do not proceed with the research until any problems have been resolved and the IRB-HS have reviewed and approved any changes.
- Report any significant findings that become known in the course of the research that might affect the willingness of the subject to take part.
- Protect the confidentiality of all personally identifiable information collected.
- Submit for review and approval by the IRB-HS all modifications to the protocol or consent form(s) prior to implementation of any change(s).
- Notify the IRB-HS when study has been completed through submission of a *Project Completion Report*, located at [https://www.tjc.edu/downloads/file/96/project\\_completion\\_report](https://www.tjc.edu/downloads/file/96/project_completion_report).

Should you have any questions or need any further information concerning this document please feel free to contact me at (903) 510-2147 or via email at [lharp@tjc.edu](mailto:lharp@tjc.edu).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Lisa Harper', is written over a circular stamp.

Lisa Harper, Ed.D.  
IRB Chair

cc: Juan Mejia

PO BOX 9020 | TYLER, TEXAS 75711-9020  
903.510.2200 | 800.687.5680 | [WWW.TJC.EDU](http://WWW.TJC.EDU)



## Appendix I. Round 2 Survey

Dear Nurse Colleague,

You are being asked to participate in the second and final round of a modified Delphi study that will ask questions about successful collaboration strategies for faculty among various generations in nursing education. The purpose of this study is to help identify key factors that improve tolerance or promote friction among generations.

Who should participate?

Licensed registered nurses

Nursing Faculty with a minimum of a Masters in Nursing (MS or MSN)

Teaching Full time in nursing program

Minimum of two years' experience in teaching

Participant Expectations:

Completion of a confidential online survey that will take 15 minutes of your time

There are no right or wrong answers to any survey questions

Honest responses are essential to better understand collaboration strategies among generational cohorts

Potential Benefits:

Increased understanding of successful collaboration strategies

Contribute to nursing research

Advancing nursing practice

Identification of new techniques to improve collaboration in workplace

Risks:

There are no known serious risks to participating in this study. Identified risks include time constraints or becoming tired when filling out surveys.

Confidentiality

Your responses will be kept strictly confidential. Administrators, coworkers, deans, or any other individuals will not have access to any of the survey results. Your participation will not be made known to your deans or program coordinators that disseminated the original email. The survey link is distributed by the primary investigator, but the data is housed at Qualtrics, an online survey program contracted by the University of Texas at Tyler. The only one with access to the Qualtrics system is the primary researcher, Heather Fowler, PhD(c), RN, CNE and the dissertation chair, Dr. Danita Alfred. The researchers at the University of Texas at Tyler will maintain the surveys, analyze the data, and report the statistical results.

## Appendix I. Round 2 Survey (continued)

### Participation & Withdrawal

Your participation is entirely voluntary. You are free to cease participation at any time without any undue consequences.

### Questions about the Study:

This study has been approved by the University of Texas at Tyler Institutional Review Board (IRB). If you have any questions regarding your rights as a research participant, please contact Dr. Gloria Duke, IRB Chair at [gduke@uttyler.edu](mailto:gduke@uttyler.edu) or at 901-566-7023.

If you have any questions or concerns during the time of your participation in this study, after its completion, or you would like to learn more about the study results please contact:

Heather M. Fowler, PhD(c), RN, CNE  
College of Nursing  
University of Texas at Tyler  
[hfowler@patirots.uttyler.edu](mailto:hfowler@patirots.uttyler.edu)  
(915)256-3654

Danita Alfred, PhD, RN (Dissertation Chair)  
College of Nursing  
The University of Texas at Tyler  
[dalfred@uttyler.edu](mailto:dalfred@uttyler.edu)  
(903) 566-7019

Giving of Consent: I have read this consent form and I understand what is being requested of me as a participant in this study.

- ☐ Yes (1)
- ☐ No (2)

*Skip To: End of Survey If Dear Nurse Colleague, You are being asked to participate in the second and final round of a modif... = No*

Q2 What type of nursing program are you currently teaching in?

- ☐ Associate Degree (1)
- ☐ Bachelor's Degree (2)
- ☐ Other (specify) (3) \_\_\_\_\_

Appendix I. Round 2 Survey (continued)

Q3 What generational cohort do you belong to?

- ☐ Silent generation-Born 1925-1945 (1)
- ☐ Baby Boomers-Born 1946-1964 (2)
- ☐ Generation X-Born 1965-1981 (3)
- ☐ Millennial- Born 1982-1999 (4)

Q4 What is your age?

- ☐ years (1) \_\_\_\_\_

Q5 What is your gender?

- ☐ Male (1)
- ☐ Female (2)

Q6 What is your email address?

- ☐ (1) \_\_\_\_\_

Q7 Would you like to opt into the drawing to win a \$100 AMAZON gift card?

- ☐ Yes (1)
- ☐ No (2)

Q8 Consider the following positive collaboration strategies. Rate each item on a scale of 1-10, on how you feel they positively affect the working environment among generations. **1- being not important, and 10- being extremely important.**

Q9 Regarding positive influences on collaboration: On a scale of 1-10, How important is **being open to the ideas of others?**



Q10 Regarding positive influences on collaboration: On a scale of 1-10, How important is **having experience and expertise?**



Appendix I. Round 2 Survey (continued)

Q11 Regarding positive influences on collaboration: On a scale of 1-10, How important is **possessing knowledge and wisdom**?



Q12 Regarding positive influences on collaboration: On a scale of 1-10, How important is **being technologically savvy**?



Q13 Regarding positive influences on collaboration: On a scale of 1-10, How important is **good communication**?



Q14 Regarding positive influences on collaboration: On a scale of 1-10, How important is **being a mentor to colleagues**?



Q15 Regarding positive influences on collaboration: On a scale of 1-10, How important is **sharing your experiences** with colleagues?



Q16 Regarding positive influences on collaboration: On a scale of 1-10, How important is **being open to trying new things**?



Q17 Regarding positive influences on collaboration: On a scale of 1-10, How important is **being open to learning from others**?



Appendix I. Round 2 Survey (continued)

Q18 Please rank the **top three positive influences** for collaboration between the generations in order of importance (drag and drop)

Top Three:

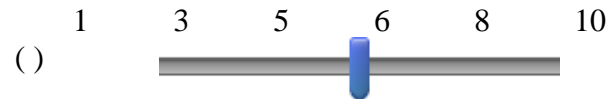
- \_\_\_\_\_ Being open to the ideas of others (1)
- \_\_\_\_\_ Having experiences and expertise (2)
- \_\_\_\_\_ Possessing knowledge and wisdom (3)
- \_\_\_\_\_ Being technologically savvy (4)
- \_\_\_\_\_ Good communication (5)
- \_\_\_\_\_ Being a mentor to colleagues (6)
- \_\_\_\_\_ Sharing your experience with colleagues (7)
- \_\_\_\_\_ Being open to trying new ideas (8)
- \_\_\_\_\_ Being open to learning from others (9)

Q19 Consider the following factors/sources of conflict that negatively influence your work, and rate each item on a scale of 1-10, on how you feel they influence your work with colleagues. **1 being no negative influence and 10 being highly negative influence.**

Q20 Regarding conflict/negative influences: On a scale of 1-10, How does **being close minded** affect generational collaboration?



Q21 Regarding conflict/negative influences: On a scale of 1-10, How does **not being willing to change** affect generational collaboration?



Q22 Regarding conflict/negative influences: On a scale of 1-10, How does **not admitting when you are wrong** affect generational collaboration?

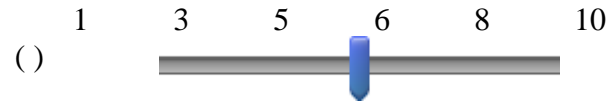


Q23 Regarding conflict/negative influences: On a scale of 1-10, How do **differences in communication** affect generational collaboration?

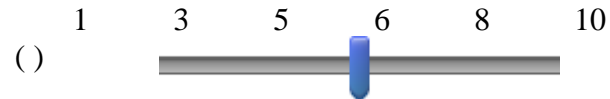


Appendix I. Round 2 Survey (continued)

Q24 Regarding conflict/negative influences: On a scale of 1-10, How do **differences in work ethic** affect generational collaboration?



Q25 Regarding conflict/negative influences: On a scale of 1-10, How does **being too focused on technology** affect generational collaboration?



Q26 Regarding conflict/negative influences: On a scale of 1-10, How do **different experiences and varied levels of expertise** affect generational collaboration?



Q27 Regarding conflict/negative influences: On a scale of 1-10, How do **colleagues having a different focus** affect generational collaboration?



Q28 Regarding conflict/negative influences: On a scale of 1-10, How does **having differences in expectations** affect generational collaboration?



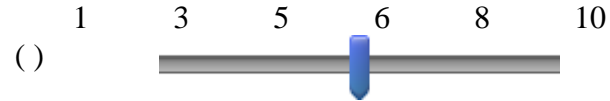
Q29 Please rank your **top three** conflicts/negative influences between the generations beginning with the behavior having the most negative influence: (drag and drop)  
Top Three:

- \_\_\_\_\_ Being close minded (1)
- \_\_\_\_\_ Not being willing to change (2)
- \_\_\_\_\_ Not admitting when you are wrong (3)
- \_\_\_\_\_ Differences in communication (4)
- \_\_\_\_\_ Differences in work ethic (5)
- \_\_\_\_\_ Being too focused on technology (6)
- \_\_\_\_\_ Different experiences/expertise (7)
- \_\_\_\_\_ Different focus (8)
- \_\_\_\_\_ Differences in expectations (9)

Appendix I. Round 2 Survey (continued)

Q30 Consider the following positive teamwork strategies, and rate each item on a scale of 1-10, on how you feel they positively affect teamwork among generations. **1-not important, and 10- extremely important**

Q31 Regarding Teamwork: On a scale of 1-10, How important is **being open minded?**



Q32 Regarding Teamwork: On a scale of 1-10, How important is **possession of knowledge?**



Q33 Regarding Teamwork: On a scale of 1-10, How important is **sharing past experiences with your colleagues?**



Q34 Regarding Teamwork: On a scale of 1-10, How important is **using positive communication?**



Q35 Regarding Teamwork: On a scale of 1-10, How important is **being a team player?**



Q36 Regarding Teamwork: On a scale of 1-10, How important is **giving 100%?**



Q37 Regarding Teamwork: On a scale of 1-10, How important is **willingness to learn?**

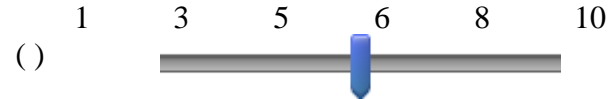


Appendix I. Round 2 Survey (continued)

Q38 Regarding Teamwork: On a scale of 1-10, How important is **willingness to help others learn**?



Q39 Regarding Teamwork: On a scale of 1-10, How important is **mentoring/mentorship among colleagues**?



Q40 Regarding Teamwork: On a scale of 1-10, How important is **technology literacy**?



Q41 Regarding Teamwork: On a scale of 1-10, How important is **active listening**?



Q42 Regarding Teamwork: On a scale of 1-10, How important is **enthusiasm**?



Q43 Please rank the **top three strategies** for teamwork between the generations in order of importance, beginning with the most important strategy: (drag and drop)

Top three choices:

- \_\_\_\_\_ Open minded (1)
- \_\_\_\_\_ Possession of knowledge (2)
- \_\_\_\_\_ Sharing past experiences (3)
- \_\_\_\_\_ Using positive communication (4)
- \_\_\_\_\_ Being a team player (5)
- \_\_\_\_\_ Giving 100% (6)
- \_\_\_\_\_ Willingness to learn (7)
- \_\_\_\_\_ Willingness to help others learn (8)
- \_\_\_\_\_ Mentoring/Mentorship among colleagues (9)
- \_\_\_\_\_ Technology literacy (10)
- \_\_\_\_\_ Active listening (11)
- \_\_\_\_\_ Enthusiasm (12)



## Biographical Sketch

### NAME

Heather M. Fowler

### POSITION TITLE

Doctoral Candidate, The University of Texas at Tyler  
Associate Professor in the College of Health Sciences  
at El Paso Community College, El Paso, Texas-Rio  
Grande Campus

### EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
The University of Texas at El Paso, BSN El Paso, TX		08/2005	Nursing
The University of Texas at El Paso, MSN El Paso, TX		12/2012	Nursing Education
The University of Texas at Tyler, Tyler, TX	PhD	12/2019	Nursing

### Positions:

2012-Present	Associate Professor, Course Coordinator, El Paso Community College- Rio Grande Campus
2013-Present	Hurst Review Services- NCLEX Prep Course Nursing Instructor- Brookhaven, Mississippi
2011-2012	Nursing Lab Instructor, El Paso Community College-Rio Grande Campus
2005-2011	Staff RN/Charge Nurse, PICU, Pediatrics, Providence Memorial Hospital, El Paso, Texas

### Professional Memberships:

Accreditation Commission for Education in Nursing  
Alpha Chi  
Graduate Student Nurses Association  
National League for Nurses  
National Nurses United  
National Society of Leadership and Success  
Phi Kappa Phi  
Sigma Theta Tau