Training as an Intervention to Improve Managers' Ability to Successfully Supervise a Generationally Diverse Workforce in Higher Education

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Training as an Intervention to Improve Managers' Ability to Successfully Supervise a Generationally Diverse Workforce in Higher Education

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This study explored training as an intervention capable of assisting managers in higher education in successfully supervising a multigenerational workforce. The goal of this Dissertation in Practice was to determine if a multigenerational management training could effectively address the identified problem of practice: many managers in the University of Pittsburgh's Office of Admissions and Financial Aid were not yet prepared to successfully address the challenges associated with an increasingly complex, multigenerational workforce.

The field of higher education possesses a set of characteristics likely to lead to associated management challenges including, but not limited to: high entry-level turnover or turnover intent (Dougherty & Andrews, 2007; Manfredi, 2008; Phair, 2014), notable generational diversity (Hannay & Fretwell, 2011; Kleinhans et al., 2015; Manfredi, 2008), limited management training (Johnson, 2002; Rumbley et al., 2018), and a lack of diversity in senior admissions leadership (Espinosa et al., 2019; Frye & Fulton, 2020; Phair, 2014). This foundation allows this study to be relevant to a broad audience and worthy of future improvement science-based interventions.

Improvement science relies on "rapid tests of change to guide the development, revision and continued fine-tuning of new tools, processes, work roles and relationships" (Bryk et al., 2015, p.1). Knowledge of the place of practice, the problem area, and the problem of practice was combined with literature on training, multigenerational management, and the multigenerational workforce to develop and deploy a training tool and corresponding assessment. The training was

based on a theory that the development of managers could produce positive long-term, impact toward the increased staff satisfaction and engagement critical for future success.

Thirty managers participated in a two-part, three module training, and a quantitative, pre- and post-assessment of knowledge and self-perceived management competence. Sixteen participants also evaluated the intervention content with a mixed-methods post- survey. The results of this study, and the significant improvement from pre- to post-assessment, both confirmed that there is room for improvement for managers of multigenerational workforces and that training does have the capacity to positively influence this progress.

Table of Contents

List of Tables

List of Figures

Dedication

I dedicate this dissertation to my husband, Brian Wright.

Brian,

God knew what I needed, and when, in connecting us at the beginning of this journey. It has

been said to me, on countless occasions, that it took a miracle for me to be finishing this

dissertation in the midst of a global pandemic…that miracle was you.

Thank you for being my rock, my coach, my number one supporter, and for both literally, and

figuratively, making me Dr. Wright.

I love you, Brian.

office's senior leadership, **Vice Provost, Marc Harding**, **Associate Vice Provost, Kellie Kane** and **Assistant Vice Provost , Molly Swagler**. Thank you for allowing me to take a critical look at our organization, thank you for the support and the feedback, and thank you for encouraging the participation required for me to accomplish this goal.

1.0 Framing the Problem of Practice

1.1 Problem Area

Adaptation to multigenerational work environments is of integral importance for maximum workplace effectiveness (Bencsik et al., 2016; Brack & Kelly, 2012; Iden, 2016; Jerome et al., 2014; Meister & Willyerd, 2010; Schullery, 2013; Wiedmer, 2015). Managers need to understand each generation, not only to know how employees do their own jobs, but also to understand how each generation can relate to their peers since fostering diversity and understanding benefits the entire organization (Grubb, 2017). Failure to recognize and react to generational diversity has presented a clear and present threat to the success of many organizations including my place of practice. According to Pollak (2019), "at this particular moment in time, generational change is happening more quickly, more broadly across industries, and in greater numbers than ever before…unprecedented age diversity is coinciding with rapid changes in technology, globalization, our environment and more" (p. 5). This presents challenges that continue to be compounded and that warrant addressing. It is up to managers to discover the various languages of the different generations within their staff and learn to speak to them (Shaw, 2013). However, multigenerational workforce challenges are a chronic issue not easily solved (Iden, 2016).

Researchers conclude age-diversity has an impact on the workplace and commonly leads to intergenerational conflict (Miller et al., 2013). Today's workplace is particularly susceptible to this conflict because it consists of as many as five generations of staff each with their own characteristics and potential proclivities to present both challenges and opportunities. To be as effective as possible, managers must constantly adapt to changes in workplace age demographics

(Wiedmer, 2015). Organizations must understand the workplace characteristics of the different age groups for multiple reasons including overall performance, personal development, and staff cooperation through strong working relationships (Jerome et al., 2014). Each generation of staff has their own style of operation, motivation for working, and expectations within the workplace (Bencsik et al., 2016; Bennett et al., 2012; Iden, 2016; Jerome et al., 2014; Kick et al., 2015; Schullery, 2013; Wiedmer, 2015). With this amount of diversity, absent understanding the differences in generational beliefs and behaviors, conflict is inevitable.

While it is debated whether or not intergenerational workplace conflict has anything to do with generational cohort membership, I adopt the generational-cohort theory framework as established by Mannheim (1953) as accurate and influential. Generational cohort theory is the most well-evidenced and established theory in the literature on generational difference. As cited by Gibson et al. (2009), Mannheim (1953) defined generations as "a group of people born and raised in the same general chronological, social and historical context" (p. 2). This context has been shown to lead to shared values, which is a topic which Gibson et al. (2009) cite was brought into popular discussion in the context of the workplace by Morris Massey (2005) who:

> raised awareness of how these differences play out in the workplace through a series of popular films beginning with —*What You Are is Where You Were When*, which implied that one's values depended on where you were during the value formation years (0-20 years) and what you experienced during that time. (p. 2)

When these formative years occurred is also subject to some debate. For the purpose of this study, I rely on the generational definitions provided by the Dimock (2019), President of the Pew Research Center (Baby boomers: 1946-1964, Generation X: 1965-1980, millennials: 1981-1996, Generation Z: born after 1996). The Pew Research Center is a widely cited, well-established, resource on world trends and demographic research.

Despite my adoption of generational-cohort theory for this research, there are several scholars who suggest that organizations should omit age and generation from operational discussions (Johnson & Lopes, 2008; Wiedmer, 2015) while others suggest generational identity matters and organizations must understand and adapt to difference (Bencsik et al., 2016; Iden, 2016). This debate is coupled with the agreement of many scholars that, whether or not generational identity is a reasonable and accurate social construct, not everyone aligns with their generational identities (Bencsik et al., 2016; Heyns & Kerr, 2018; Schullery, 2013; Tulgan, 2013). While this is accurate, I do not believe that warrants dismissing generational identity as a challenge worth addressing for several reasons. First, understanding generational differences and preferences can give some direction in circumstances where the ideal approach (adapting to every single individual) is not feasible. Second, there are certain indelible factors associated with generations that go beyond characteristics, or chosen preferences (e.g., transitions in ethnic diversity), that make it likely that the different generations will be consistently different from one another in several ways. For example, in the United States, 42% of Millennials are non-white, which is double the percentage of Baby Boomers (Cappelli & Novelli, 2010), and 48% of Generation Z identify as racial or ethnic minorities, compared to 18% of Baby Boomers (Pollak, 2019). These data alone demonstrate important generational differences.

There appear to be three broad reasons generational diversity produces organizational conflicts that are compounded over time and that warrant intervention: (1) an evolving "new" workplace reality with new structures and organizational composition, (2) an ignorance of the unique needs associated with generational diversity, and (3) a failure to adapt to either of the aforementioned situations. The following descriptions of these reasons for organizational conflict

provide a more in-depth depiction of the problem area that motivated the implementation of an improvement science-based intervention in this Dissertation in Practice (DiP).

1.1.1 Evolving "New" Workplace Reality

According to the literature and reports from industry workforces are in the midst of a unique transition defined by two major occurrences: (1) baby boomers are working longer and returning to work more often, and (2) organizational hierarchies where promotion and title are decreasingly based on longevity and increasingly based on grasp of technology and perceived capacity to innovate, which leads to, primarily, Millennial hierarchal leapfrogging.

1.1.1.1 Baby Boomers Working Longer, Returning More Often

The past 40 years have seen a major change in traditional trajectories of employment. Older workers, Baby Boomers in particular, both out of desire and necessity (Cappelli & Novelli, 2010; Grubb, 2017), are staying in the workforce longer than ever (Cappelli & Novelli, 2010; Clifton & Harter, 2019; Grubb, 2017; Mencl & Lester, 2014; Pollak, 2019). In 2018, more than 250,000 Americans over the age of 85 were working, which is the highest number ever on record (Pollak, 2019). According to the Bureau of Labor Statistics, the annual growth rate of those 55 and older joining or remaining in the workforce will be three times the rate of the overall workforce (Grubb, 2017). This trend is not temporary. Life expectancy is also on the rise (Cappelli & Novelli, 2010). Compounding this complexity is that, for the first time in 20 years, the workforce is experiencing simultaneous growth at both ends of the age spectrum as Generation Z enters the workforce for the first time (Pollak, 2019). This means, in addition to two sets of baby boomers, those staying in

the workforce longer and those leaving and then returning, some organizations could employ as many as six generations of workers (Pollak, 2019).

Despite them being one of four to six generations in the workforce and no longer the majority, the workforce must continue to accommodate baby boomers, both those leaving and those returning. For those leaving, this means succession planning and the collection of institutional knowledge, and for those returning it means targeted professional development and opportunities considerate of the needs of an older workforce (Cappelli & Novelli, 2010; Clifton & Harter, 2019). It also means addressing new internal competition. Because people are living longer and retiring later, waiting one's turn for promotion is no longer viable or considered by staff to be reasonable (Shaw, 2013). Younger generations are committed to earning mid-level roles that prior generations would have waited to attain. For higher education, this challenges traditional human resources shift, ones where younger staff completed graduate programs, older staff moved to middle management, and the oldest staff moved to senior leadership positions (Brown, 2017).

1.1.1.2 New Organizational Hierarchies

The behavior of the older workforce and the increasingly widespread practice of promoting and hiring millennials into mid-level roles has altered organizational hierarchies and created new challenges for managers. As greater numbers of baby boomers return to the workforce, it will not be uncommon to see them seeking jobs that were once filled by recent college graduates just entering the workforce (Cappelli & Novelli, 2010). This transition is occurring at the same time as previous entry-level workers, millennials, are rapidly becoming managers (Grubb, 2017). Individuals from Generation X and prior came from workplaces where promotion was determined by length of service, career ladders, and waiting one's turn to reach the next level (Grubb, 2017; Pollak, 2019). Millennials' unprecedented access to information that could previously only be

learned through length of service (Shaw, 2013) combined with increased organizational desire for the capacity to innovate (Grubb, 2017; Pollak, 2019) and a strong grasp of technology (Grubb, 2017) have led to the rapid climb of the Millennial manager as companies seek out these individuals for mid-level positions (Grubb, 2017). Further, performance and talent have begun to trump longevity or amount of management experience in promotion decisions (Pollak, 2019). This means a greater number of baby boomers are now reporting to younger managers. In fact, 38% of Americans now claim to have a boss that is younger than them, which is "a totally new phenomenon" (Pollak, 2019, p. 6). Furthermore, in a Society of Human Resource Management (SHRM) survey of 260 employers, 90% reported having at least some older workers who reported to a younger supervisor (Cappelli & Novelli, 2010). While these new promotional decisions may make sense from a competitive perspective, it does mean that many managers, experienced primarily in information access and technology, are often being placed in complex and often novel people-management scenarios for which they have no experience.

In general, millennial managers are often managing older generations for the first time (Grubb, 2017). The mismatches that exist today have created uncomfortable environments for both Boomers and those responsible for supporting them and have produced noted dissatisfaction (Cappelli & Novelli, 2010). As summed up by Cappelli and Novelli (2010), older workers have "presented a new set of challenges for younger managers and older workers, alike" (p .xiii). When it comes to the acceptance of older workers within the workforce, "the main constraint is conflicts and misunderstandings with younger managers" (p. xiii). The new managers not only have to deal with the dissatisfaction of baby boomers but also the expectation of Generation X that leaders earn their respect rather than having it granted by way of a title (Shaw, 2013).

As described by Pollak (2019), the workplace has been designed with the needs and interests of the baby boomer and Traditionalist staff in mind. "The reason today's generational change is so shocking for so many individuals and organizations is the length and power of the Baby boomer's generation in all of American culture" (Pollak, 2019, p. 3). New workforce demographics mean that the idea of a traditionally aged hire in any position is in a place of transition. While trends may differ slightly across industries, data support that there is value for leaders (especially those in high turnover industries like college admissions) in understanding, preparing for, and adapting to multigenerational workforces and their associated challenges.

1.1.2 Expectation Ignorance

The prevalence of conflict across generations in both novel and established contexts is not surprising. Intergenerational conflict can be seen as "differences in values, views, and ways of working talking and thinking that set people in opposition to one another and challenges organizational best interests" (Zemke et al., 2013, p.12). While we must be careful not to generalize to every member of a generation, generations often differ in their expectations in the following areas: work-life balance, autonomy, what they enjoy in the workplace (Cappelli & Novelli, 2010; Grubb, 2017), career advancement opportunities, diversity climate, and immediate recognition and feedback (Mencl & Lester, 2014). Differences across generations are also prevalent in several essential categories related to staff management including incentive/motivation, performance evaluation, training, learning, development, conflict management (Bencsik et al., 2016), preferences, priorities, and work ethic (Iden, 2016). It is difficult for managers to know and adapt to these expectations for several generations of staff simultaneously. In general, there is still

relatively little known about how to address "potentially diverging motivational needs of the various generations" (Heyns & Kerr, 2018, p. 1).

This situation is further exacerbated by the trends that have added complexity to the manager role. According to Grubb (2017), to be excellent in a complex, four-generational workforce—what they refer to as "the new workplace reality"—novice managers and veterans alike will require training. Established tactics a manager may have used for supervising the traditional entry-level employee may no longer apply, or a manager may find themselves in management ranks without any supervisory experience or developed skills in managing difference. Organizations can conceivably include individuals working in the same entry-level positions who are three generations apart, and it cannot be assumed that role (or title) alters generational expectations, nor can it be assumed that every member of a generation will share expectations. A specific example is in management of the "new" entry-level employee. The Baby Boomer returning to work in an entry-level role still has many similar expectations to the Baby Boomer in senior leadership (e.g., respect, a valued opinion, a desire for professional development), and this should not be overlooked (Cappelli & Novelli, 2010). The newest generation, Generation Z, joins baby boomers in sharing expectations that may seem mismatched for their place in the organizational hierarchy, but they too come to work from a different place than their predecessors. Despite little proven work experience, Generation Z tends to be more highly educated and affluent than previous generations, which has made them comfortable in having established expectations (including immediate respect and opportunity) and being willing to leave if expectations are not met (Seemiller & Grace, 2018). Millennials are similarly likely to leave an organization where they are unhappy since they have experienced a reduced stigma behind changing jobs than prior generations (Pollak, 2019). With these considerations in mind, it is critical for managers to

understand the expectations of those they manage to not only successfully address conflict but to orient solutions and identify similarities. According to Hannay and Fretwell (2011), identifying generational similarities can help organizations create effective working relations based on common expectations such as interesting work, growth opportunities, good compensation, the use of technology to enhance efficiency and productivity, and effective communication. Looking at management expectations, specifically in a multigenerational, mixed-methods study of supervisees, Arendt et al. (2014) concluded that employees across generations had similar expectations for managers, desiring: that they hold them accountable, that they be available, well informed and involved, that they are role models, that they adapted to different expectations across staff of different ages, and they encouraged fun in the workplace.

1.1.3 Failure to Adapt to Generational Preferences

Regardless of the approach they choose to take, workforces have had to and will continue to adapt to increases in generational diversity (Fodor & Jaeckel, 2018). Managers' understanding of multiple generations helps them to support those who succeed them (Rani & Samuel, 2016). In a study based on differences in perceptions of the psychosocial work environment, Kleinhans et al. (2015) concluded that certain generations, Millennials in particular, relate their workplace satisfaction directly to their employer and on the balanced relationship between their job demands and the respect they receive from their supervisor. Millennials were also found to have higher expectations than baby boomers or Generation X that a role with high time demands and work life conflicts would provide them with benefits like increased fairness and recognition. Managers have to remain cognizant that their perception of fairness and respect may be related to their own

position rather than the perspective of their staff and be prepared to adapt accordingly (Kleinhans et al., 2015).

Pressure on managers does not stop there. Clifton and Harter (2019), whose work includes millions of interviews of employees and managers across 160 countries over 30 years, concluded strong management is the single most important factor in determining organizational success or failure and that managers play a direct role in the turnover and workplace satisfaction of their staff. When it comes to meeting expectations as workplaces diversify, managers may be tasked with redefining even common interactions. This could be particularly difficult in highly collaborative work environments like those found in higher education and college admissions. For example, our organizations laud, encourage, and require collaboration and teamwork; however, research has shown that both Gen X (Berk, 2013; Cekada, 2012; Lewis & Wescott, 2017; Lowell & Morris, 2019) and Gen Z in greater numbers prefer to work independently (Seemiller & Grace, 2018; Stillman & Stillman, 2017). To quantify, Stillman and Stillman (2017) found that 71% of Gen Z believed the saying, "If you want it done right, then do it yourself," applied to them (p. 264). This trait was likely adapted from Gen X parents who often learned to rely on independence as divorced, single parents or latchkey kids (Stillman & Stillman, 2017). While these generations view independence as efficient, it may be perceived in the workplace as standoffish (Seemiller & Grace, 2018), and, once again, lead to conflict. Managers must be prepared to address the perceptions of others, to support distinctive styles, and to define and establish compromises, to ensure everyone can work effectively.

Similarly, managers must be prepared to audit their incentives and motivation tools. In most cases there is no one solution that would appeal to all groups including typically appealing solutions such as raises. For example, 75% of Gen Z believed work should be about more than

making money compared to 45% of millennials, 40% of Gen X, and 33% of baby boomers (Seemiller & Grace, 2018). New generations in the workforce will mandate managers consider new incentives. As an example, despite little proven work experience, GenZ tends to be more highly educated and affluent than previous generations, which has made them comfortable in both having established expectations and being willing to leave if those expectations are not met (Seemiller & Grace, 2018). This could present a particular challenge to organizations, such as my place of practice, that rely heavily on entry level talent in their workforce since this population will most commonly be Gen Z. Similarly, diversity is a workplace mandate that has intensified with time. Both Gen Z and millennials see diversity as a critical element in a desired workplace. It is unsurprising that feature would be on their list of non-negotiables and potentially not on their predecessors. Forty-two percent of Millennials are non-white (Cappelli & Novelli, 2010), and 48% of Generation Z identify as racial or ethnic minorities, compared to only 18% of baby Boomers (Pollak, 2019). This may present an interesting challenge for the college admissions field, which is traditionally lacking in racial diversity: "non-whites are underrepresented at all points on the admissions career trajectory" (Phair, 2014, p. 5). In Phair's (2014) study, the proportion of Black staff in the admissions profession was 11% of counselors and assistant/associate directors and 5% of vice presidents and deans; for Hispanics, the numbers were 8% and 2%, respectively. These numbers do not appear to be increasing over time. In the study, only 14% of White, non-Hispanic professionals were seeking a new career outside of admissions, but 73.7% of non-White professionals were considering other opportunities. In a study based on the Integrated Postsecondary Education Data System (IPEDS) data, Frye and Fulton (2020) found that people of color were underrepresented in higher education, leadership in particular, and two-thirds or more

of all professional staff in higher education were White including 71% of staff at MA/PhD granting institutions.

Beyond suggesting the need for managers to adapt, the increasing number of staff supervising employees with some characteristic of diversity (e.g., age, race, or sexual orientation) may exacerbate the human resources-related challenges for organizations and present novel situations for managers. This is not inconsequential. Specifically referencing age, Cappelli and Novelli (2010) caution that managers have to be increasingly cautious not to discriminate against this population within hiring or in day-to-day interactions. Cultural competence is now well-beyond an optional skill for managers as baby boomers, Gen Z, and the still growing population of millennials in the workforce may exponentially compound the number of individuals belonging to protected classes in any organization.

1.2 Problem Area in Context

Higher education institutions are particularly vulnerable to the challenges of age diversity (Berk, 2013; Hannay & Fretwell, 2011). This is due not only to the natural age diversity in academia but also due to the fact that higher education institutions have not responded to the presence of this diversity (Berk, 2013). Narrowing down the problem area to my specific place of practice from my preliminary observations and understanding of the literature along with almost 10 years of experience supervising and being supervised by several generations of staff, leads me to believe that higher education organizations are particularly vulnerable to facing challenges related to age diversity in the workforce. Figure 1 summarizes some of the issues prevalent in our industry that make taking steps toward addressing these challenges of paramount importance.

Generation Z
We frequently hire recent
college graduates
(first to manage new to
workforce generations)

How We Promote
Based on performance
without management
pre-requisite

No Supervisory Training
Typical emphasis on
interpersonal
communication or hard
skills

Reasons for the
Prevalence of
Multigenerational
Management
Challenges in Higher
Education

Lack of Ethnic and
Generational Diversity in
Leadership
Diversity in senior
leadership is not
representative of the
entering generations

High Entry-Level
Turnover
Team composition is
constantly changing and
diversifying, admissions
field is known for staff
either staying for "three or
thirty" (years)

Number of Generations
Represented in the
Workforce
Four or five generations
consistently present,
people working longer,
new generations entering

Figure 1. Reasons for the Prevelance of Multigenerational Management Challenges in Higher Education

I developed this depiction based on discussions with experienced colleagues, on personal observations, and on information found in research. While a couple of these conclusions are primarily anecdotal and based on observation, most are also supported by the literature. These reasons include entry-level turnover or turnover intent (Dougherty & Andrews, 2007; Manfredi, 2008; Phair, 2014), notable generational diversity in academia (Hannay & Fretwell, 2011; Kleinhans et al., 2015; Manfredi, 2008), training limitations (Johnson, 2002; Rumbley et al., 2018), and lack of diversity in senior admissions leadership (Espinosa et al., 2019; Frye & Fulton, 2020; Phair, 2014). New promotional structures were never referenced in the context of higher education specifically but were noted as a new challenge for organizations in general with recruiting of millennials (often for tech skills and innovation) trumping longevity and disrupting the traditional

hierarchy (Grubb, 2017; Shaw, 2013). This disruption in hierarchy assures that generations are no longer separated by levels as they would have been in the past (Zemke et al., 2013).

In addition to these challenges, non-profit organizations (like my place of practice) are also faced with trying to "win the war for talent" without being able to offer the salaries offered by industry which makes it imperative that they motivate and inspire each generation (Shaw, 2013). As summarized well by Kleinhans et al. (2015), "The future and vitality of the academic workforce may be in jeopardy if the challenges associated with generation specific dispositions that determine typical engagement behaviors in the workforce are not identified and addressed" (p. 90).

Despite the critical importance of this, the impacts of the changing workforce composition are less understood than the familiar changes caused by economic shifts or technological growth (Kleinhans et al., 2015); this situation led to my problem of practice.

1.3 Statement of the Problem of Practice

Based on research conducted within my organization in the process of identifying a problem of practice, I was able to establish that many managers within the University of Pittsburgh's Office of Admissions and Financial Aid are confronted with the challenges of supervising an increasingly complex, multigenerational workforce—challenges they are struggling to address. This is evidenced by self-proclaimed management concerns, research conducted within the organization, and symptoms associated with staff dissatisfaction that are identified in literature. Managers who cannot manage diversity are subject to many corresponding challenges including but not limited to: conflict, staff turnover, and decreased engagement and the inability to take advantage of the benefits of well-managed diversity such as innovation, creativity,

reductions in groupthink (Clifton & Harter, 2019; Grubb, 2017), and a stronger capacity to serve "diverse external customers in an increasingly global market" (Patrick & Kumar, 2012, p. 14), through an increased ability to "attract and retain clients of different generations" (Weiss Haserot, 2018, p. 10). Thus, my identified problem of practice is that many of our managers are not yet prepared to successfully address the challenges associated with the increasing generational diversity of our workforce.

This situation is not necessarily a direct reflection on the quality of our managers. Based on both research and personal experience, my organization is among many that have not yet fully avoided or successfully addressed the challenges of generational diversity in the workforce. As was established in the problem area, multigenerational management represents what would be referred to in improvement science as a VUCA (Volatile, Uncertain, Complex, Ambiguous) problem (Heifetz et al., 2009). Solutions to VUCA problems do not just happen; organizations must first identify the problem and then make a commitment to solutions. The application of improvement science processes, including diagraming the problem and engaging in a Plan-Do-Study-Act process toward addressing the problem of staff satisfaction issues, helped to identify both the problem as well as possibilities on why it has yet to be addressed.

In this scenario, one of the reasons my place of practice has yet to act upon the identified concerns is that our success may have overshadowed our problem, and I develop this theory in the following section on site and context. One of the values of improvement science is the process of this identifying. As strategy necessitates greater reliance on our people, managers need to be trained to be managers. The consequences of staff dissatisfaction are far-reaching, and generational misunderstandings are the crux of many workplace conflicts. Ultimately we can improve our workplace by improving our managers (Clifton & Harter, 2019).

1.4 Site and Context

Generally speaking, many organizations have a lack of formal training for managers (Cappelli & Novelli, 2010; Grubb, 2017), and they promote individuals based on employees' contribution rather than proven management skills (Grubb, 2017). According to Gallup, as reported by Grubb (2017), "only one in 10 people possess the inherent talent to manage" and "companies fail to pick good managers 82% of the time" (p. 5). As described in the problem area these challenges only stand to be exacerbated as generational diversity adds a layer of complexity to our workforce. I am not making a claim on how often we have gotten our manager selections "right" within my place of practice since that is too subjective. However, the reported low staff satisfaction percentages in my place of practice (assessed via observation, conversation, and both qualitative and quantitative surveying), and our frequent turnover suggest an opportunity for intervention and a targeted test of change.

The challenges presented in Figure 1 are representative of what make my organization susceptible to the problem of managers who are not prepared to supervise the complexities of four generations of staff. Success is not defined as being a "good" manager but as being aware of generational differences and similarities, being able to understand these characteristics and adapt accordingly, and finding ways to reduce conflict and use this diversity to our organizational advantage.

While the literature confirms my problem of practice extends beyond our industry and certainly beyond my place of practice, I have chosen my inquiry to take place specifically within my organization, the Office of Admissions and Financial Aid at the University of Pittsburgh in Pittsburgh, Pennsylvania. My office is a 110-person team that works in collaboration with several different university entities to procure one of the university's largest sources of revenue, student

tuition, by recruiting each year's class of undergraduate students. We are broken down into several distinct functions all working in collaboration toward that central goal. These teams include systems and data, financial aid, operations, admissions, marketing, visitor engagement, recruitment and budget and human resources. The process of confirming the problem of practice and developing a theory of improvement was multi-faceted, see Figure 2.

Problem Area			Problem of Practice		Intervention			
Symptom Analysis	Artifact Research	Observation + Informal Interviews + Qualitative Surveying	Quantitative Research (Surveys)	Driver Diagram + Change Idea	Training Development	Trial Run	Pilot Study Full Content	Formal Training Intervention
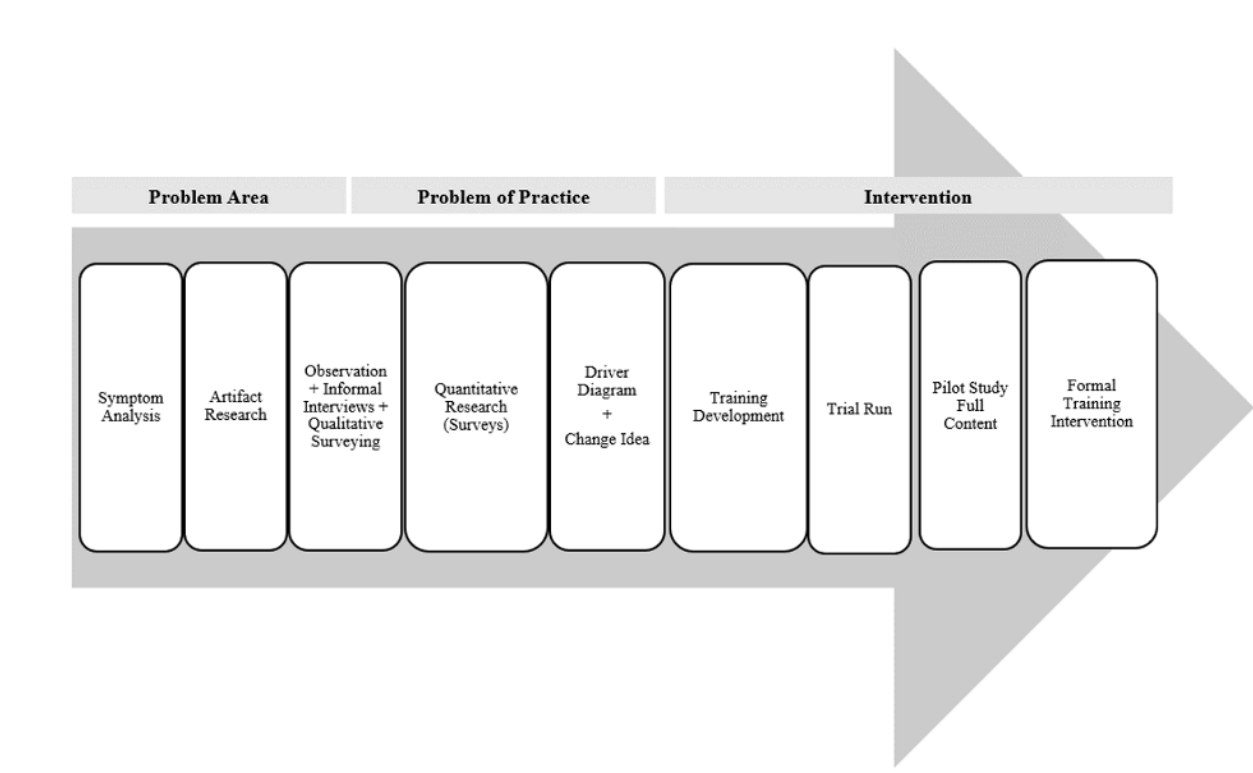
Figure 2. Process for Identifying Problem of Practice and Implementing Test of Change

Symptom analysis primarily consisted of observation of continued high turnover and hearing continued reports of workplace dissatisfaction despite positive organizational changes including a new management structure and increased pay. Artifact research was also conducted as part of improvement science methodology in locating an area where a problem could exist within the organization. In doing artifact research on my organization, I located our internal mission, vision, and seven core values. This document was a notable example of organizational priorities

17

within our field and provided evidence for the problem of practice. Despite a robust array of strong commitments to those we serve, no element of my organization's mission, vision, or core seven values references our commitment to staff, which is a gap certainly capable of leading to a problem of practice (see Appendix A for the full content). Admissions offices (and, in some cases, student affairs) in general are known for being external-oriented, held to numbers of "the class," "tuition revenue," and "profile." Staff dissatisfaction, based most often on perceptions of few opportunities for work-life balance and long hours that do not correlate with pay is something higher education leaders have grown to understand and expect. Even the consequent turnover is treated as non-surprising, particularly in entry level admissions roles.

In my perspective, having had six supervisors within our organization and several conversations with employees who have left or wish to leave, it is clear to staff that these number-oriented values drive many of our managers. Number orientation often makes our managers successful performers, which is aligned with our mission, but it does not always make them successful leaders. Observation and further inquiry including informal interviews and qualitative surveying led me to further solidify whether our organization could be suffering from a management problem and that this problem could be generational and correlate to multiple aspects of the problem area. Some quotes from this research included:

- "My manager treats me as if this is my first job because this is an entry level role in our office."
- "I have 10+ years of experience and don't understand why I can't be given more autonomy."
- "My boss behaves like they are my parent; I don't need that level of instruction."
- "This is not my first job; I do not need to be micromanaged."
- "I could figure out how to get things done, if left to figure it out my way."

From a data evidence standpoint, the office experienced turnover equivalent to just under 10% of our entire staff in the duration of my study. While I certainly would not attribute the entirety

of this to generational conflict, many reported concerns seemed as if they could be associated with generational conflict. After developing the theory that generational conflict could be one of our issues, I conducted informal research and two preliminary surveys to further understand staff satisfaction and whether managers were an appropriate target for an intervention (see Appendix B for the full summary). When asked, 80% of supervisors in my organization and 44% of supervisees indicated they would probably or definitely not be surprised by turnover. Only 60% of supervisors and 46% of supervisees indicated feelings that our office was appropriately concerned about turnover. Seventy-one percent of supervisees had at least some doubt that our office lacked a preference for one generation over the other. Seventy percent of supervisors reported being extremely comfortable managing staff of a different generation. Seventy-two percent of staff felt their title or position dictated how they were treated, and only 14% of staff felt their manager tailored their management approach to the personal preferences of their staff over the individual's role in the office.

After these surveys, I attempted to gauge the impact these perceptions were having on satisfaction (see Appendix C). The results, depicted in Table 1, provide a more complete foundational summary of the symptoms warranting intervention via improvement science. The key statistics were that 40% of staff reported that their direct manager understood how they prefer to be managed, 38% indicated extreme satisfaction with our workforce, 21% indicated extreme satisfaction with their functional area, and 59% indicated that management plays a role in their satisfaction. (It is important to note that renowned workplace satisfaction researchers Clifton and Harter (2019) have concluded there is a statistically significant difference between a Likert scale response of "4" and "5" when it comes to employee research, so it is appropriate to consider scores below "extremely satisfied" (a 5 on my scale) as of concern).

Table 1. Cross-Generational Management Satisfaction Survey

Question	Overall Averages (N=76)	Team								
		Administration /Human Resources (n=2)	Data/Systems (n=6)	Financial Aid (n=15)	Marketing (n=3)	Operations (n=17)	Recruitment (n=20)	Transfer (n=0)	Visitor Engagement (n=10)	Prefer Not to Say (n=3)
% who feel direct manager understands how they prefer to be managed	40	50	50	60	67	41	37	0	20	33
% Extremely satisfied w/OAFA	38	50	67	33	33	35	26	0	40	67
% Extremely satisfied w/Functional Area	21	100	17	7	100	29	22	0	20	67
% Who feel management impacts satisfaction	59	100	50	53	67	59	56	0	70	33
% who have told supervisor how they'd like to be managed	59	100	67	67	100	59	61	0	30	33
% who would feel comfortable telling supervisor how they'd like to be managed	84	100	67	93	100	88	94	0	100	100

Note. *N=76 because three staff indicated more than one functional area; however, 73 total surveys were completed. Generations represented included Baby Boomer (n=10), Gen X (n=16), and Millennial (n=47). Gen Z was not formally represented, but six Millennials were cuspers born 1995 or later, which some authors would define as*
Gen Z.

These data provided important information that led me to believe there was value in targeting an intervention at supervisors, there existed a misunderstanding in management preferences, and there was room for improvement in staff satisfaction. For those reporting "definitely yes" to "my supervisor knows how I prefer to be managed," 50% were extremely satisfied with their workplace and 33% were extremely satisfied in their area, which are both above average for the overall workplace. For those reporting anything less than "definitely yes," only 26% were still "extremely satisfied" with their workplace and only 24% were still "extremely satisfied" ,with their functional area. Most staff across generations (58%) were less than completely confident that their supervisor knew how they prefer to be managed and most staff across generations (58%) agreed that how they are managed impacts their workplace satisfaction.

Having heard satisfaction issues from supervisees most often and noting entry-level as our largest area for turnover, I looked specifically at their results, which were also enlightening and indicated a large degree of variation. Disaggregating the data by generation produced robust results. Baby boomers and members of Gen X felt substantially more strongly that their managers understood their preferences (60% and 56% vs 31% of Gen Y). Gen X was much more satisfied in OAFA than any other generation (67% extremely satisfied compared to 38% overall) and millennials were much less satisfied (31%). All staff were similarly satisfied with their functional areas, but the Millennial "cuspers" (arguably Gen Z) were much more satisfied (40% extremely satisfied vs. 21% overall). Baby boomers and Gen Z were much more confident that management played a role in their satisfaction (80% and 67%, respectively, than millennials, 52%). Boomers were much more likely to express to their manager how they would like to be managed (80% vs 56% for Gen X and millennials). Gen X was the least comfortable at expressing to their managers

21

how they would like to be managed, and Gen Y was by far the most comfortable (88% vs 80% of boomers and 78% of Gen X).

These findings led me to conclude the following (which helped me to establish the significance of my study and develop an experience and literature informed intervention): 1. There was a perceived lack of respect for experience from older staff in early career positions. 2. A majority of staff had confidence in the likelihood of turnover. 3. Most staff believed our office favored a specific generation of staff. 4. Most staff felt their title dictated their treatment. 5. A small minority believed their manager tailored their leadership style to the preferences of their staff. 6. The substantial percentage of staff, across most generations, at least somewhat agreed how they were supervised affected their workplace satisfaction and that their supervisor did not completely understand their needs, and 7. The average staff member was currently less than "very satisfied" at work.

1.5 Significance of Study

As depicted in Figure 1 in a more macro sense, those in the field of higher education may be naturally susceptible to facing challenges associated with multigenerational management (Berk, 2013; Hannay & Fretwell, 2011; Kleinhans et al., 2015). However, research shows a consistent or proactive response either does not yet exist or remains unstudied. Colleges and universities often hire current students and recent college graduates while also being organizations where length of service is often given immense value and recognition, which leads to individuals remaining for their entire career. Colleges and universities currently employ as many as five, and arguably six, generations of staff. The University of Pittsburgh currently employs five generations of staff:

Traditionals (.70%), baby boomers (23.7%), Gen X (37.7%), millennials (36.2%), and Generation Z (1.7%). My office employees four generations of staff, including baby boomers (13%), Gen X (22.2%), millennials (62%), and Generation Z (3%). Within my place of practice and in college admissions specifically, early-career positions are often filled with recent college graduates exploring the workforce while determining their future careers (Barnds, 2009). That may not be ideal; in a 2011 survey of almost 1,500 college admissions professionals, Phair (2014) concluded that over three-fourths of admissions professionals aged 30 or younger planned to seek a new opportunity within three years. A separate generational challenge also occurs as over two-thirds of those 41 or older planned to remain in their current role for at least the next three years (Phair, 2014). Education could also be a consistent future field for the newest generation in the workforce, Generation Z. According to Seemiller and Grace (2018), Generation Z is pragmatic, and they will seek out fields that are high growth and less prone to eventual automation including education, medicine, and sales. This helps attribute particular significance to a study that seeks to positively enhance our organization's ability to benefit from, as opposed to struggle with, the diverse representation of generational cohorts found within our office.

In higher education, people are a valuable resource. While the data are not disaggregated by responsibility, 22% of the budget at public, four-year degree-granting postsecondary institutions go to resources including staff and resources for academic support, admissions, student services, student activities, libraries, executive and administrative activities, and an additional 28% goes toward faculty salaries and benefits (McFarland et al., 2018). At the University of Pittsburgh, for FY2019, faculty and staff salaries and wages made up 46.1% of the annual budget (University of Pittsburgh Office of Institutional Research, 2019), a critical investment. Looking specifically at college admissions within non-profit universities, investment in human resources is important, as

student recruitment is considered a critical revenue-generating function (Dougherty & Andrews, 2007). This revenue is being relied upon more greatly as it is becoming more difficult to come by.

While many outsiders to higher education may not be aware this is occurring, the field is facing a sharp consumer decline with fewer high school graduates in the Midwest and Northeast, in particular, and older individuals who have foregone returning to school for direct entry into the workforce (Marcus, 2017). As reported by Marcus (2017), according to the National Student Clearinghouse, in 2017, there were 2.4 million fewer college students than there were in 2011, which makes it hard for colleges to compete and generate revenue. This situation has been called unprecedented and is not predicted to improve until 2023 (Marcus, 2017). Despite the decline in potential consumers, admissions offices, like my place of practice, will be under increasing pressure to perform as institutional budgets rely heavily on tuition revenue to function (Dougherty & Andrews, 2007; Marcus, 2017). This increasing pressure has also generally come without increased resources, which is another trend in higher education (Kleinhans et al., 2015). The pressure to perform, recruit students, and bring revenue to the university will be maintained while several elements of day-to-day operations remain in flux. New demographic compositions can either be a challenge that unaddressed leads to conflict and turnover costs or helps solve these issues through motivating creativity and reducing groupthink (Clifton & Harter, 2019; Grubb, 2017; Pollak, 2019). Ultimately, changes within society and within our field could potentially make my place of practice even more susceptible to the challenges of an age diverse workforce. A robust body of research exists in support of generational cohort theory (Cogin, 2012), yet to date very few academic studies exist that critically evaluate options for solutions. This provides an opportunity for this study to make a positive contribution to research.

1.5.1 Stakeholders

In further establishing the significance of exploring this problem of practice, a critical component of improvement science is the identification of stakeholders. Stakeholders are defined as individuals or organizations that stand to be impacted by the selected intervention, and the sections to follow identify key stakeholders in this intervention from broad to narrow.

1.5.1.1 Contribution to General Practice

Generally speaking, deciding to target an improvement-based intervention toward managers was not challenging; Gallup estimates the cost of poor management and lost productivity from disengaged employees to be $7 trillion per year worldwide (Clifton & Harter, 2019). Further, research has by in large concluded that improved management skills (in addition to understanding generational differences) is a critical component to effective multigenerational relationships (Lewis & Wescott, 2017). My research, experience, personal conversation, and observations have confirmed the findings of the literature. Employee engagement is critical. For some organizations, including ours, employee engagement or lack thereof has impacted several elements integral to their success. Research has shown these elements include net revenue, earnings before taxes, number of workers' compensation claims, shareholder return, product quality, customer service, turnover, customer satisfaction and loyalty, employee loyalty, and willingness to advocate for their employer (Schullery, 2013). Lewis and Wescott (2017) also emphasized the impact of failure to recognize generational difference on turnover and add the risk of reduced efficiency. My personal experience has confirmed many, if not all, of these things to be true of our organization as well. The likelihood of supervising a multigenerational staff is growing increasingly prevalent throughout the globe, and characteristics of higher education and the college admissions field have

made my place of practice particularly susceptible to this likelihood. As it relates to the bottom line, failure to acknowledge individual differences in ones' management style is not inconsequential, especially as it relates to generational diversity (Gibson et al., 2009).

1.5.1.2 The University of Pittsburgh at Large

"College campuses perhaps more than other workplaces require ongoing interaction among the generations" (Hannay & Fretwell, 2011, p. 2). In one of few studies that looks at higher education specifically, Kleinhans et al. (2015) concluded the "value of knowing the generational composition of a higher education institution, in order to take into account, the unique needs of each generational cohort when planning ways to improve recruitment, retention, and productivity of administrators, faculty and staff" (p. 89). Given the role of my place of practice as a key revenue generating function for our university as previously described, I would argue that staff satisfaction, in as much as it impacts performance, is of consequence for the university at large. Student recruitment is widely considered a critical revenue-generating function for universities and non-profits in particular (Dougherty & Andrews, 2007; Marcus, 2017). In 2019, tuition and fees represented 27% of our total operating revenues at the University of Pittsburgh (University of Pittsburgh Office of Institutional Research, 2019). Critical to the procurement of that resource is our people. And, over the past two years, our office has lost leadership in several critical functions to voluntary turnover at all levels, including but not limited to, an executive director, a director, an assistant director, and very experienced enrollment services managers. As our office experiences turnover, the university loses intellectual capital that is invested in procuring critical revenue (revenue that the COVID-19 pandemic has only made more critical) and also capital that fewer resources are being provided to replace (Kleinhans et al., 2015).

In an increasingly competitive environment, colleges and universities are at a place where turnover of this magnitude is something they cannot afford financially or in lost knowledge. Turnover generally costs organizations approximately 20% of an employee's salary (Boushey & Glynn; Schroth, 2019). In fiscal year 2017, turnover cost the University of Pittsburgh just shy of $5.3 million dollars—approximately 21% of those employees' salaries (Fullem & Korbich, 2018). Ultimately, resources going to turnover are not going to innovation for competitive advantage, to research for advancement, or to diversifying our university but to replace staff we already had. While some turnover is good, it comes at a price. As stated by Fullem and Korbich (2018):

> When employees leave, the ripple effect can be felt throughout the University. Lost knowledge, training costs, interviewing costs, and recruitment costs all add up. The University cannot ignore the long-term implications of high turnover has on our students, research, and success. (p. 2)

While many things could impact turnover, our best odds and, in some instances least expensive odds, are to improve our managers. Poor managers have been found to be the most prevalent cause of organizational turnover, and strong managers correlate directly with retention (Clifton & Harter, 2019).

1.5.1.3 Senior Leadership in the Office of Admissions and Financial Aid

Senior leadership, of course, shares both concerns and repercussions with the university at large. They also share a need to address and adapt to an increasingly diverse world and working environment. As stated by Clifton and Harter (2019), "diversity categories are expanding rapidly," and "the topic of diversity and inclusion has emerged at the top of most leader's priority lists for a reason" (p. 131). The priority list for our senior management is no different. However, in addition to having an increasingly diverse workforce in race, ethnicity, and gender identity, our office also has to address the oft more subtle challenges of age-diversity. These challenges that will be

compounded by Gen Z who not only adds a new age-cohort to our office but also possesses unprecedented diversity in each of the aforementioned areas. Higher education leaders are also being asked to do more with fewer resources (Kleinhans et al., 2015).

Senior management in college admissions cannot afford to treat potentially avoidable expenses as negligible particularly as employees in higher education are being called to do more with less (Berk, 2013; Kleinhans et al., 2015) and will have to "depend more heavily than ever on the commitment, dedication, and hard work of their employees" (Hannay & Fretwell, 2011, p. 2). Put into context, the college admissions world, especially in Pennsylvania, is growing increasingly competitive as fewer students graduate from high school. Generation Z students and their families are also likely the most cost-conscious set of consumers society has yet to encounter. As the most expensive public institution in the state of Pennsylvania, we will have our work cut out for us to find ways to make Pitt affordable and to retain staff who have the ability and institutional knowledge to recruit and communicate value. The university is leaning on this group for outcomes. As touched upon previously, the ability to successfully manage a multigenerational staff in such a way that they are satisfied, engaged, and retained is critical if for no other reason than it impacts our own capacity and ability to accomplish their goals. As someone who supervises a staff of 20 representing four generations, I know from personal experience we do not accomplish anything without engaging our people, and one size does not fit all. There is consensus within our leadership that people issues consume more time than any other work initiative. Time can only be spent once, thus staff satisfaction, and the ability to provide the support and resources necessary to create it, is invaluable.

1.5.1.4 Managers within the Office of Admissions and Financial Aid

Managers who are not necessarily senior leaders but do supervise multiple generations of staff, while they may have fewer direct external expectations, certainly have a stake in addressing the challenges of an age-diverse workforce. For the first time in history, a manager could potentially have five generations (and often at least three or four) generations of staff reporting to them at any one time. Managers will be challenged to be much more generationally and culturally competent in order to remain focused on the individual needs of staff, which may now vary greatly. The general manager could be expected to, at minimum, face the challenges of supervising a "new" generation of staff. This could either be the baby boomer returning to work or the Gen Z staff member entering the workforce for the first time. This is consequential as these are anticipated to be two of the tougher generations to manage given their relative novelty. Millennials in particular may face challenges having been promoted for excellent work without management experience or proven acumen. A Deloitte study found that "64% of Millennial leaders felt unprepared when entering their first leadership role" (Pollak, 2019, p. 156).

Older generations also tend to have a general mistrust of the "younger" manager. Almost one-third of "older" employees said being managed by a younger manager bothered them (Cappelli & Novelli 2010). For Generation Z, no best practices really exist. To intensify the situation, the way Baby Boomers must be treated in the workforce is governed by legislation against age discrimination as governed by the Age Discrimination in Employment Act (ADEA) of 1967, and staff must be familiar with what this means. Generation Z may also present challenges as they require a new level of cultural competence of their leaders. Generation Z is the most diverse generation in history in multiple facets including not only race but also sexual orientation (only two-thirds identify as exclusively heterosexual (Rudgard, 2018) and many have even formulated

their own sexual identities (Tulgan, 2013)). They expect their managers to respect and support diversity and for their environments to reflect their demographics. This may mean more than managers taking a basic training as Generation Z may also require an unprecedented level of vigilance to monitor their satisfaction, and leaders cannot rely on being told they are doing something wrong or right. While other generations may have brought their employer complaints directly to human resources, Generation Z is more likely to voice their opinions or perceived violations directly to the internet (Spiers, 2019). Younger generations in general have "the tools and confidence to expose bad bosses" and are not ever hesitant to do so (Pollak, 2019, p. 88). Our managers must be prepared to be good bosses and, even more so, strong leaders.

1.5.1.5 Non-Management Staff in the Office of Admissions and Financial Aid

The next identified stakeholder in my problem is the employees being supervised. These individuals represent the long-term targets of my intervention since the success of their managers will hopefully correlate to their satisfaction, engagement, production, and ultimate retention. Further, these individuals could one day become managers, and a precedent of the office offering training for adapting to generational diversity could prove beneficial for them in the future. Staff have expressed mismatches between their workplace expectations and what is afforded to them. Many concerns relate to management. Our staff share concerns with those found in research on generational difference including studies that corroborate a sentiment that managers who are utilizing a one size fits all approach in their leadership are doing their staff a disservice. In general, addressing manager competency related to age-diversity is one step toward better serving this workforce and meeting their expectations. Students and Families

The final stakeholder in this research is our students and families who benefit from the performance of engaged staff and also from organizations that adapt in line with their changing

consumer. As referenced by Hill (2004) in the context of a nursing environment, learning to relate to each generation's language will not only lead to greater understanding and positivity, but "your patients will also notice, benefiting from optimal outcomes of a higher-performing team" (p. 35). Age diversity has also been found to create environments that produce "well-thought-out decisions" and "increased responsiveness to customers" (Mencl & Lester, 2014, p. 25). Organizations have taken heed of these and adapted in several ways. For example, White (2008) highlights Novo Nordisk leader, Andrew Ajello, who brought success to his organization by adapting to each generation his communication style, his sales-performance emails, and even general benefits like which company vehicles to offer. These decisions proved to have positive impact on sales. I feel confident the same would be true of our customers in a college admissions landscape. An organization where everyone feels included and has the satisfaction of being treated in the way they would prefer to be treated will naturally perform better. Consumers know the difference between working with someone who loves their work and is engaged and someone who is just doing what needs to be done.

1.6 Overview of the Study and Intervention

Managers need to be prepared to supervise a new workforce, one that spans "multiple generations with wildly different ideas about work ethic, work-life balance and long-term career goals, among many other issues" (Grubb, 2017, p. 4). Ultimately, workplaces that are not generation friendly place organizations at risk of turnover, poor inter-office relationships, and inability to transfer knowledge from supervisors to supervisees (Kick et al., 2015). Although it is worth noting as a limitation that there is some disagreement around whether generational identity

has a notable impact on workplace behavior, it is generally accepted that an understanding of this impact is relevant (Schullery, 2013). The bottom line is that adaptation to multigenerational work environments is of integral importance for maximum workplace effectiveness (Bencsik et al., 2016; Brack & Kelly, 2012; Iden, 2016; Jerome et al., 2014; Meister & Willyerd, 2010; Schullery, 2013; Wiedmer, 2015). Assuming confidence in the conclusion that managers play the most integral role in organizational success, management development is an ideal place to target an improvement science-based intervention where practical knowledge is applied to solving an identified problem of practice.

The review of supporting literature to follow will establish managerial training as an intervention with the capacity to help organizations use generational diversity to their advantage rather than their detriment. As complex as the increasingly age-diverse workplace of the future is anticipated to be, it also presents organizations with myriad new opportunities. If handled appropriately, generationally diverse organizations can avoid limitations of groupthink and can creatively solve problems (Clifton & Harter, 2019; Grubb, 2017; Pollak, 2019). Teams also benefit from the friction of new membership (Clifton & Harter, 2019). However, these benefits can only be realized in an organization that is built to support this diversity. To be able to take full advantage of the benefits afforded by age diversity, workplace environments must be built in alignment with what different generations desire (Mencl & Lester, 2014).

Certain fields that rely heavily upon a high-turnover, entry-level workforce (among them, college admissions) should feel a sense of urgency in grasping the capabilities and limitations of each new generational cohort. This situation will grow more complex overtime as the world attempts to adapt to the most diverse workforce in history (Pollak, 2019). Workplaces are amid a "new reality," one that requires "prioritizing the creation of a culture of inclusion that supports

innovation from employees of any age" (Grubb, 2017, p. 32). According to Clifton and Harter (2019), "about half of great managing is rooted in hard wire tendencies, and the other half comes from experiences and ongoing development" (p. 120). Organizations that do not adapt their management to change will "be overcome by their competitors—or put out of business" (Clifton & Harter, 2019, p. 162). As the college admissions landscape grows increasingly competitive, we can be poised to react through developing our managers and consequently our organizations. One critical area for development is managing generational difference, which is a skill the literature establishes can be developed through management training. The chapters to follow will provide supporting knowledge for this claim (Chapter 2), describe an improvement science-based implementation of the foundational knowledge—a three-pronged training based in the revised Bloom's taxonomy and Mannheim's Generational Cohort theory (Chapter 3), offer results (Chapter 4), and provide discussion and suggest implications for future study and action (Chapter 5).

1.7 Researcher's Reflexivity

It is critical to acknowledge my role as the Director of Undergraduate Recruitment within the organization where this intervention is taking place. This role makes me both peer to some and supervisor to others who participated in this study. Practically, this position has improved my capacity to observe the studied problem of practice and to use relationships to garner support for my research. It has also provided me access to key organizational data and an in-depth knowledge of the challenges faced by my organization. I have been part of my organization for nine years and have supervised teams comprised of up to 25 staff and four generations. I have had six different

supervisors including three baby boomers, two Gen X, and a millennial and have become familiar with management styles (and correlating issues and concerns) within our organization.

In addition to general familiarity, I am particularly passionate about the topic of this research as a millennial, the youngest director, and the only woman of color in senior leadership. This position has allowed me to contribute to progress while also grappling with challenges of feeling isolated and misunderstood by leadership, a feeling I believe can be shared whenever difference of any kind goes unrecognized, unacknowledged, or under-recognized or under-acknowledged. This has created in me a personal and empathetic commitment to recognizing diversity and building equity and inclusivity within our organization. Despite being in multiple respects a minority, I am trusted as a leader by both my staff and my peers. I am known for knowing my staff very well, for being a strong manager, and for having low voluntary staff turnover (and for almost always "seeing it coming" whenever turnover does occur through a keen ability to sense workplace contentment or lack thereof).

Despite establishing a robust perspective founded in inquiry and longevity within my place of practice, there are potential implications, and associated limitations, to my positioning: including bias in drawing conclusions, accuracy of peer/supervisee self-reports of program efficacy, and improvement due to the recognition of the problem and not my specific intervention. First, I had a personal stake in seeing my intervention succeed which could have introduced bias into my process of drawing conclusions. A quantitative approach to determining efficacy, coupled with a formal measure of effect size, worked to mitigate this risk, yet it is still worth acknowledging.

Second, there was the potential likelihood that staff may have felt motivated to say they felt more knowledgeable or had increased competence after my training because of their

relationship with me and/or desire for my study to be proven successful. Anonymous, quantitative measuring in pre-post testing was implemented to decrease the likelihood of this occurring, by reducing any associated pressure of being identifiable, but it should remain under consideration as a possible limitation.

Finally, because I had done so much research in advance in establishing my problem of practice, my entire organization was widely more cognizant of the issues we face in this area, at the point of my intervention. and many had already begun trying to adapt their natural styles to generational expectations, including asking me for guidance and advice. Request for my insight, and the insight of others, was heightened in the era of COVID-19 where we increased our commitment to try to demonstrate empathy and understanding for one another, I am confident that many managers entered my study more informed than they were when I initially developed the idea for the intervention.

2.0 Review of the Supporting Literature

The literature proposes two practical solutions to addressing the challenges of managing a multigenerational workforce: cross-generational mentorship and training; both of these solutions were considered in developing the intervention presented in Chapter 3. Despite being the less prevalent solution in academic research by far, training was selected for three reasons: (1) the ability of this study to contribute new knowledge to both practice and scholarship, (2) it was the more naturally imbedded solution within my place of practice, because training (though not in staff-management) is already commonplace, and (3) it was the more feasible intervention to conduct in an entirely remote environment as mandated by the COVID-19 pandemic. In framing this study and establishing a foundation for my proposed intervention, I have conducted a review of scholarly and practitioner knowledge on the topic of the multigenerational workforce that explicitly looks at management challenges and how training can address these issues, most explicitly my aforementioned problem of practice.

The literature confirms the postulation of Fodor and Jaeckel (2018) that workplaces have had to and will continue to have to adapt to increases in generational diversity both in their day-to-day operations and in the development of the organizational culture that they will advertise to potential new hires. The review of supporting scholarship that follows gives a foundation for my chosen intervention, offers thematic background on training as described in the literature, provides relevant limitations, and concludes with the theoretical framework that provides the foundation for the study to follow.

2.1 Training as an Intervention

A review of supporting scholarship on managerial adaptation to the multigenerational workforce provides a solid foundation for pursuing training as a means for addressing challenges of staff dissatisfaction that are hypothesized to be related to multigenerational management challenges. As expressed by Twenge and Campbell (2008), "New technology comes with an owner's manual, but the generation of new employees does not" (p. 862). The rapid change and diversity brought into organizations due to the increasing presence of multiple generations has intensified what is expected of managers. Regardless of generational composition, training is recommended during times of organizational change (Amayah & Gedro, 2014). "Today more than 55 years separate the oldest active workers from the youngest ones" (Lowell & Morris, 2019, p. 111). Further, managers, or an organization's leadership, have been found to be the critical element in determining the success of any organization (Clifton & Harter, 2019) including specifically the multigenerational workspace (Hillman, 2014). Leaders in generationally diverse workforces need to have the skills and ability to supervise efficiently, effectively, and across different preferred methods of communication; they must also have a clear knowledge of best practices in this context (Hillman, 2014). Managers must consistently adapt to changes as new employees and new generations are hired (Twenge & Campbell, 2008). These new generations are not simply new young workforce entrants, they are different in many ways, specifically psychologically from those who came before them (Twenge & Campbell, 2008). This complicates the workforce environment. As stated by Hill (2004):

> No management issue is beyond the scope of multigenerational considerations—be it recruitment, benefits, discipline, or retention. Relating in the different languages of the four generations will help ensure that you're better understood, as well as increase understanding among peers. Your staff should feel more positive about themselves, their peers, their jobs, and their efforts and your efforts. (p. 35)

Strong managers have the capacity to help organizations use generational differences to their advantage as opposed to their detriment. This involves the ability to recognize areas of similarity and to find ways to reach understanding of shared values toward a goal of finding common ground (Lester et al., 2012). Training (although often coupled with mentorship) is referenced in much of the newer research on the topic of multigenerational workforces (Cappelli & Novelli, 2010; Clifton & Harter, 2019; Grubb, 2017; Pollak, 2019; Shaw, 2013). It is also described as the specific intervention recommended by Al-Asfour and Lettau (2014), who, following a robust literature review on multigenerational workspaces, established that training modules though a challenging approach is one where benefits outweigh costs. They concluded that training creates capacity for organizations to achieve their "one ultimate goal: to maximize the creativity and productivity of their employees in order to meet the needs of the organization for the benefit of stakeholders and stockholders" (p. 67). Looking at college admissions specifically, the standard has been two weeks of training with a relaying of standardized procedures followed by an opportunity for autonomous decision making (Hodum & James, 2010). This leaves a gap in knowledge from a management perspective that training can fill. Like others who recommend training, it is provided as a next steps solution based on research conclusions on the challenges of managing an age diverse workforce.

Some organizations that have reacted to multigenerational management challenges with training include Motorola, Texas Instruments, Allstate, DuPont, and Eli Lilly, IBM (International Business Machines), and Citicorp (Eversole et al., 2012). Some examples of adaptations these organizations have made include: making training part of their vision statement (Motorola), training managers on both business need and worker need decision-making skills (Texas Instruments), providing managers with training on the creation of supportive environments

(Allstate), requiring managers to take courses on how to use flexibility (DuPont), teaching managers about the business case for providing considerations for work/family balance, and giving related results vs. face-time focused performance management training (Eli Lilly) (Eversole et al., 2012).

Studies show that in academia management training is less formalized and is instead a skill learned over time through practice (Johnson, 2002). Managers in academia develop gradually on the job through "incremental involvement in management tasks," through being "coached by peers and senior manager-academics and through "critical reflection and conversation" (Johnson, 2002, p. 49). Because of this approach, where management skills are considered something to be developed throughout the career, academics are known to have a "steep initial learning curve" for management roles (Johnson, 2002). Rumbley et al. (2018) also attested to this specifically looking at the topic of training in the academic workforce globally and definitively concluding through their research that "the majority of higher education leaders and managers around the world receive no formal/specialized training for their work" (p. 6).

While academic literature remains limited on the specific topic of multigenerational management training (again, four generation workforces are only about 20 years old, and five-generation workforces largely began in 2020) in combining the literature on generations, training, management, and multigenerational diversity, three themes emerged that attest to the value of training as an intervention with the capacity to help managers successfully address the management challenges of a multigenerational workplace: (1) training can provide critical knowledge on generations at work, (2) training can help create capacity for understanding differences and addressing multigenerational conflict, and (3) training can help provide the skills needed to be able realize the benefits of multigenerational diversity and promote inclusion.

2.1.1 Training Can Provide Critical Knowledge on Generations at Work

Training helps organizations and leaders to understand the demographics of their talent and these associated needs. Training can provide the foundational knowledge to meet these expectations as there are more generations in the workforce than ever before (Pollak, 2019). Today's workforce is rapidly increasing in complexity. Complex economic demands and rapidly changing workplace demographics have forced immediate change (Stevens, 2010), and research has shown that failure to respond is not inconsequential. For example, "management failure to address generational work-value differences has been shown to result in low organizational morale, increased turnover, and reduced profits" (Hillman, 2014, p. 241). Thus, for a training-based intervention to be effective it must both inform managers and provide them with the enhanced capacity to understand and adapt to a multigenerational workforce. Managers will be forced to deal with new generations of younger workers differently than in the past and with less empirical evidence about their workplace values to guide them (Twenge, 2010). Generational diversity can only complicate, the already challenging, multifaceted, role of the manager. As stated by Hillman (2014):

> Depending on the size and demographic composition of a manager's workforce, it may be necessary for the manager to implement systems and procedures that are appropriately designed to meet the needs of four generations of employees and also align with the goals and objectives of the organization. (p. 250)

The existing literature on multigenerational workforce regularly emphasizes that "effectively handling generational difference in the workforce is one of the biggest challenges faced by managers today" (Dokadia et al., 2015, p. 81). Generational differences are thought to be so complex that some managers may not be able to handle them even with training (Eversole et al., 2012). Leaders are also expected to have the ability to develop future leaders and must be

trained to give feedback in line with generational preferences (Dokadia et al., 2015). Managers must remain cognizant that different generations will have different expectations of their leaders and various sources of motivation (Dokadia et al., 2015). Put forth by Twenge and Campbell (2008) (known for some of the only longitudinal studies on generational difference to date), companies whose managers understand generational differences at a deeper level beyond technology "will be more successful in the long run as they manage their young employees, finding ways to accommodate differences in some cases and exert constructive counterpressure in others" (p. 873).

Training the supervisor is a natural approach to improving a multigenerational workforce environment because the established reality is that people across generations relate their job satisfaction to their supervisors. A survey of 163 individuals across four generations found the vast majority (over 80%) of baby boomers, Genn Xers, and millennials felt that several characteristics of their overall job satisfaction were related directly to their supervisors including having good rapport with their supervisors, having patient and tolerant supervisors, and having clear explanations from supervisors (Lewis & Wescott, 2017). Training helps organizations and leaders to understand the demographics of their talent and these associated needs. Training can provide the foundational knowledge to meet these expectations, as there are more generations in the workforce than ever before (Pollak, 2019).

As the workforce diversifies, so do the expectations of managers. According to Dokadia et al. (2015), "studies suggest that employers or managers should provide their employees appropriate opportunities and recognition according to their needs and create a work environment that fosters productivity in every generation" (p. 81). Managers must recognize that different employees will have different "needs, goals, and motivators" (Eversole et al., 2012, p. 618).

Research has found that managers who understand how generations differ, specifically in work-values, are able to develop policies and procedures that promote more unified values (Hillman, 2014). Training provides the foundation for understanding generational differences and similarities in values, needs, and workforce preferences which, coupled with action, can produce positive results.

2.1.2 Training Can Create Capacity for Understanding Differences and Reducing Conflict

The expectation of managers in a multigenerational workforce is not only to know the needs, values, and preferences of their employees but also to be able to develop means for recognition that match with these specific expectations all while building a productive, collaborative environment for staff of as many as five generations. Regardless of composition, when leading in a generationally diverse workforce, leaders are expected to be flexible and responsive; they need to know how to encourage collaboration, to be adaptable, and to be able to develop potential and embrace differences (McNally, 2017). Failure to do so often results in misunderstandings that include consequences of negative employee morale as well as turnover (Lewis Johnson & Anderson, 2016; Weiss Haserot, 2018). Managers are also placed under the pressure to help those they supervise be understanding of multigenerational colleagues. As articulated by Dokadia et al. (2015) managers have a responsibility to help their employees "to understand the generational characteristics of their co-workers, to foster better understanding, communication and teamwork" (p. 81).

The prevalence of difference and conflict has presented a particular challenge for younger supervisors who are more often facing the responsibility of managing older workforce; a dyad that is increasingly prevalent yet remains unfamiliar (Yang & Matz-Costa, 2018). Age dichotomies,

where older workers are supervised by younger managers, have been shown to negatively impact engagement (Yang & Matz-Costa, 2018) and to result in workplace dissatisfaction and conflict (Cappelli & Novelli, 2010), which further compounds the challenge for supervisors. However, the literature supports strong managers can combat these challenges and resulting conflicts in a few ways. Suggestions include possessing an awareness and recognition of the challenges and dynamics of that specific interaction (older worker-younger supervisor) (Hillman, 2014; Yang & Matz-Costa, 2018) and finding ways to evidence for older staff that they (as the younger manager) are "efficient, reliable, knowledgeable and enthusiastic" (Avery et al., 2007, p. 1553), as a means of garnering trust.

Developing understanding also requires managers of all ages to be able to identify how their typical responses to situations may be problematic in the context of a multigenerational workforce, which often means they "need to be taught to generate more creative alternatives" (Eversole et al., 2012, p. 618). Beyond knowledge of generational facts, they need to understand staff at a psychological level to understand their values and what motivates them (Twenge & Campbell, 2008). Lewis Johnson and Anderson (2016) recommend that, to adapt to a multigenerational workforce, managers learn "perspective taking," calling it "the best way to overcome and prevent conflict between generations in the workplace" through its ability to help workplaces "get past generational stereotypes and address the underlying issues of communication, cooperation, and a positive work culture" (p. 71). Training is one way that organizations move from diversity to inclusion by teaching employees to both learn about and be sensitive to differences across cultures and backgrounds (Patrick & Kumar, 2012).

Understanding also plays a critical role in inclusion and in conflict mitigation both of which are efforts tasked to the manager. Research has shown that, although a commitment from the

organization is also important, the immediate manager plays a critical role in whether individuals feel included (Shore et al., 2018). Leaders must be trained to understand and to coach (McNally, 2017). This feeling stems from how employees are treated, which goes beyond what supervisors may know to be true of their generations. Organizations are expected to provide their employees with equitable and fair treatment based on their ability and not on any arbitrary characteristics associated with individual identities (Patrick & Kumar, 2012). This is not always simple, however. Generational diversity in the workplace often results in several incidents based on work-value conflicts, and it is critical that managers understand how to mitigate those conflicts effectively (Hillman, 2014; Sarraf et al., 2017). Failure to apply understanding in management can have far-reaching consequences. Put forth by LaRosa (2014), "to further reduce legal liabilities, employers should also consider educating managers on best practices in managing a multigenerational workforce" (p. 6), noting that even frustration with behavior resulting from misunderstanding could be viewed as age-discrimination. Training can assist managers in understanding values, and workstyles that can improve communication, adjust expectations, and assist managers in learning to "assess employees based on their individual skills, abilities and performance, and not on broad assumptions based on stereotypes about generational characteristics" (LaRosa, 2014, p. 6).

2.1.3 Training Can Help in Realizing the Benefits of Diversity and Promoting Inclusion

While generations are a diversity dimension that, compared to others including gender, race, nationality, ethnicity, and disability, is less often considered, it calls for managers' attention (Akhavan Sarraf et al., 2017). Workplaces are becoming increasingly diverse, but "scholarship focused on inclusion is still in its initial stages" (Shore et al., 2018, p. 177). There is much research and information on what diversity entails but less on how to react to it. Managers' response to

44

generational diversity should be action-oriented, thus the gap for training. Managers are expected to be able to mix up their channels of communication and their reward systems, understand and support what each generation values, and to leverage the strengths of each generation toward common goals (McNally, 2017). To adapt to differences in satisfactions, managers must know how to creatively build collaborative teams across generations and associated working style (Lewis & Wescott, 2017). Managers are expected to "promote a culture of competence around strengths and opportunities to learn and grow" (Avery et al., 2007, p. 1552). Leaders are also expected to have the ability to develop future leaders and must be trained to give feedback in line with generational preferences (Dokadia et al., 2015).

Generational diversity has the capacity to be a huge asset to any organization (McNally, 2017; Pollak, 2019); however, this is contingent upon diversity being coupled with inclusion (Shore et al., 2018). Diversity has been shown to provide companies that embrace it with productive advantages (Dokadia et al., 2015; Hillman, 2014; Patrick & Kumar, 2012; Twenge & Campbell, 2008) including innovation, creativity, and reductions in groupthink (Clifton & Harter, 2019; Grubb, 2017). Patrick and Kumar (2012) summarize this well in claiming "Organizations with diverse employees are better suited to serve diverse external customers in an increasingly global market. Such organizations have a better understanding of the requirements of the legal, political, social, economic, and cultural environments" (p. 14). Managed successfully, differences can help create a positive work culture and lead to organizational improvements in engagement in motivation and in "generational synergy" (Dokadia et al., 2015, p.93) and improved strategies to enable organizations to understand, appreciate, and put the diversity of their organization to productive use (Akhavan Sarraf et al., 2017). To be most effective, managers should build environments that are cognizant of what allows each generation to be productive while providing

each with what they need to be successful (Dokadia et al., 2015). This is critical. Flexibility, while it may be difficult for managers to manage, is considered an important trait across generations (Cappelli & Novelli, 2010; Clifton & Harter, 2019; Eversole et al., 2012; Grubb, 2017; Pollak, 2019). It has been concluded that to be as competitive as possible, organizations must figure out how to "capitalize on the strengths generational diversity can bring to the workplace, such as the sharing of perspectives leading to creativity and innovation" (Hillman, 2014, p. 242). This can start with the manager.

Empirical research supports that effective management of diversity can benefit employees not only through helping them maximize their potential and ability to contribute to the company but also through enhancing organizational performance and overall awareness (Patrick & Kumar, 2012). As found by Akhavan Sarraf et al. (2017), "managing workforce diversity and developing an inclusive work culture is imperative for businesses for efficient talent management" (p. 110). To be successful, diverse organizations will need to be able to understand and cultivate the unique traits of their new workforce entrants and apply them for the benefit of their organization. Doing so may even provide competitive advantages few have considered. For example, while not commonly considered, it may benefit organizations to recruit Baby Boomers more actively. Despite Baby Boomers currently being a population that is misunderstood and victims of stereotype and workplace discrimination (Cappelli & Novelli, 2010), research has suggested there may be value in recruiting and retaining older workers as they tend to be more engaged as workers (Yang & Matz-Costa, 2018).

How managers approach difference impacts the culture of their organizations (Akhavan Sarraf et al., 2017). To do this effectively, managers must be able to close the gap "between understanding and working effectively across generations," to be able to engage and retain their

employees (Akhavan Sarraf et al., 2017, p. 110). As cited by Lewis and Wescott (2017), the Chair

of the U.S. Equal Employment Opportunity Commission, Cari Dominguez stated:

> In today's highly competitive, global economy, an organization in tune with its age-diverse workforce will enjoy a real competitive edge. Generational blending can enhance creativity and productivity, as age-diverse work teams are able to approach problems and challenges from a variety of vantage points and draw from a greater breadth of experience (Dominguez, 2003, p. 4). (p. 6)

This statement summarizes well the advantages to an organization of managers who know how to

translate the challenges of generational diversity into efficiencies, collaboration, and excellence.

In sum, the ideal training intervention will help make information applicable to workplace

operations. As stated by Kleinhans et al. (2015), "Just as the academy has had to embrace issues

brought on by increased racial and ethnic diversity on campuses, it must now sensitize itself to the

varied work-life balance needs of the multigenerational workforce" (Kleinhans et al., 2015, p.

100). As previously stated, conflict, not properly addressed, negatively effects the bottom line,

however, and even more importantly, unaddressed conflict related to diversity can have legal

implications. The natural change in workplace demographics as new generations enter the

workforce has also meant that organizations need to be increasingly cautious about discriminating

against staff based on their age (Avery et al., 2007). In addition to purely being cognizant about

protected class violations, organizations must adjust their organizations as they diversify, and age

diversity is no exception to this rule.

Without inclusion, diversity can have consequences including increases in turnover and

conflict and decreases in overall performance (Sarraf et al., 2017; Shore et al., 2018). Diversity

without inclusion can also have a negative impact on cohesion (Shore et al., 2018), motivation

(Sarraf et al., 2017), and overall efficiency (Lewis & Wescott, 2017). As organizations diversify

in many ways simultaneously (age, gender, sexual orientation, race, ethnicity), managers will have

to remain cognizant that the sheer presence of diversity does not lead to inclusion. Inclusion does not just happen; it is the result of active decision making and it "requires a leveling of the playing field and providing opportunities through organizational and managerial practices that offer real prospects of equal access to valued opportunities for employees who belong to social identity groups that experience greater discrimination" (Shore et al., 2018, p. 177). The role of the manager in a diverse workplace is to promote inclusion, to demonstrate to workers that it is okay not to conform to "pre-established organizational values and norms" and a place where varied perspectives are valued (Shore et al., 2018, p. 177).

2.2 Limitations

Studies on the generationally diverse workforce include several notable limitations as it relates to my research: (1) where these studies have been conducted and drawn conclusions, (2) studies on age diversity are relatively new (workplaces only had three generations up until about 20 years ago), (3) the workplace demographics of those studied organizations and their hierarchies, and (4) the overarching debate about whether generational identity is in fact a legitimate construct for understanding human behavior.

2.2.1 Location of Study

The background on this topic is limited as few formal studies on the multigenerational workplace have been conducted within student affairs (Berk, 2013). While this will allow this study to contribute to both the literature and to scholarly practice, it should be recognized as a

limitation in any ability to correlate results or generalize conclusions. One of only a couple studies I found specifically related to higher education was conducted by Kleinhans et al. (2015), which contained a notable limitation of its validity for an increasingly diverse workforce, as the study population was majority older and white.

2.2.2 Novelty of Subject Matter

Not only is the workplace experiencing the first five-generation workforce in history with the entrance of Gen Z, for the first-time organizations are growing at both ends of the age spectrum (Pollak, 2019), which is complicating the familiar scenario of new generations entering as another retires. In line with this novelty, there are few studies related to the five-generation workforce since it is debated if one currently exists, and, even if it does, it is recent and still developing, as literature does not possess consensus on where the millennial generation ends, and Gen Z begins (Rickes, 2016). This study utilizes the Pew Research Center time span for Gen Z (born 1997 or later) and joins Pollak (2019) in believing that "at this particular moment in time, generational change is happening more quickly, more broadly across industries, and in greater numbers than ever before" (p. 5). Even taking this approach, Gen Z for the most part only entered the workforce in 2020.

Whether researchers believe there to be four generations in the workforce or five, there were only three generations in the workforce as little as 20 years ago, leaving little time for empirical research and especially longitudinal studies to have occurred. As described by Twenge and Campbell (2010), "the limited research on generational differences in work values has often relied on nonempirical data (anecdotes, interviews) or problematic methods (cross-sectional studies, which cannot separate the effects of age and generation)" (p. 1122). Many studies lack the empirical support needed to either substantiate or refute claims related to generational differences

in the workplace and have also been conducted at a single point in time which could lead the impact of age and that of generation being confounded (For example, do participants behave how they do because they are 18 at the time, and would all 18-year-olds have that shared behavior? Or is it because they are a member of a specific generation?) (Twenge & Campbell, 2010). Finally, today much of the academic literature on workplaces still deals with culture and gender, and most of the conclusions related to multigenerational workforces come from the public press and are based on observation (Cogin, 2012).

2.2.3 Transitioning Organizational Hierarchies

Organizational hierarchies are in a state of transition, a transition that has begun within my workplace but is still not yet commonplace within the literature. Much of the literature appears to assume a traditional organizational hierarchy where the older worker is the manager learning about the new, younger generation (Benson & Brown, 2011; Gibson et al., 2009; Rani & Samuel, 2016) and where the managers who follow baby boomers are Gen X (Cekada, 2012; Gibson et al., 2009). The most often discussed major workforce transition is the mass retirement of older workers and the mass entrance of new and younger workers (Stevens, 2010; Twenge, 2010). However, traditional hierarchies are undergoing rapid change, and this is true of my place of practice.

These changes include the promotion of younger, less experienced staff (Cappelli & Novelli, 2010; Grubb 2017) and flattened organizational structures with fewer opportunities for upward mobility and greater competition for the same jobs (Lewis & Wescott, 2017). This means that the current proposed solutions have been built to be most effective in an older and more senior level workforce learning about their younger counterparts. As established, this situation is rapidly becoming less and less the norm, and, while most are still recommending the same established

solutions, there has been little proven about their efficacy in a new reality. Even studies that have recognized the new dyad of the younger or same aged staff supervising older workers do not consider the education or the experience of the younger managers (Yang & Matz-Costa, 2018). The education of the younger generations is worth considering as millennials are currently the most educated generation in the workforce and will have this surpassed by Gen Z (Fry & Parker, 2018; Schroth, 2019) although it will be a long time before Gen Z is experienced in the workforce. Additionally, few studies ask specific ages; in the case of Yang and Matz-Costa (2018), for example, their study on non-traditional supervisor/supervisee dyads was based on whether participants *felt* their supervisor was the same age, older, or younger than them, which was a noted limitation in drawing conclusions.

2.2.4 Debate about the Legitimacy of Generation Related Differences

Finally, a recognized limitation is the debate between whether generational differences are real or are instead just generalization or stereotypes. An intervention based on generations will need to respect this perception. Although most researchers agree that the characteristics of each group have been defined enough to draw conclusions (Bencsik et al., 2016), some continue to debate that there are far more perceived than actual differences across generations (Mencl & Lester, 2014). Others have found no differences among generations along key facets of organizational behavior such as workplace motivation (Heyns & Kerr, 2018), while others have found differences along that same construct (Dokadia et al., 2015). There are at least a few reasons this may be occurring including the population studied, the type of study (many are qualitative and have the associated roles of author interpretation and inference), and the number and choice of variables used to draw conclusions. For example, some studies use only a single dimension and

51

conclude there are differences while others use several dimensions and reach conclusions of both differences and similarities, which are most common. Studies have shown there to be multiple dimensions over which generational difference and similarity can be measured, and, while the majority conclude there are generational differences, the conclusions are rarely unanimous.

A taxonomy of studies on generational differences developed by Amayah and Gedro (2014) depicted below in Table 2, illustrates this debate and breaks down generational studies into five categories. The results of their review evidenced robust support for both difference and no difference across generations with a slight majority going to the existence of difference. Further, the same authors who found no difference in one construct found difference in another and vice versa.

Table 2. Taxonomy of Studies on Generational Differences

Variables	Studies that found generational differences	Studies that found no generational differences
Organizational Citizenship Behavior		Shragay & Tziner (2011)
Values, Goals, and Preferences, Expectations and Behaviors	Westerman & Yamamura (2007) Cennamo & Gardner (2008) Twenge (2010) Twenge & Campbell (2008) Twenge, Campbell, Hofmann, & Lance (2010) Meriac, Woehr, & Banister (2010) Brody & Rubin (2011) Gibson, Greenwood, & Murphy (2009) Chen & Youngsoo (2008)	Cennamo & Gardner (2008) DeMeuse & Mlodzik (2010) Costanza, Badger, Fraser, Severt, & Gade (2012) Hansen & Leuty (2012) Brody & Rubin (2011) Parry & Urwin (2011)
Organizational Commitment and Generational Difference, Work Attitudes, and Motivation	Sullivan, Forrest, Carraher, & Mainiero (2009) Wilson, Squires, Widger, Cranley, & Tourangeau (2008) Lub, Bijvank, Bal, Blomme, & Schalk (2012) Carver, Candela & Guttierrez (2011) Leiter, Jackson, & Shaughnessy (2009) Busch, Venkitachalam, & Richards (2008) D'Amato & Herzfeldt (2008) Lyons, Duxbury, Higgins (2005) Hess, & Jepsen (2009) Fletcher, Roberts, Gibson, Gibson, Cooke, Eldridge, Hoffman, & Mundy (2009)	Lub, Bijvank, Bal, Blomme, & Schalk (2012) Carver, Candela, & Guttierrez (2011) Leiter, Jackson, & Shaughnessy (2009) Davis, Pawlowski, & Houston (2006) Kowske, Rasch, & Wiley (2010) Wallace (2006) Keepnews, Brewer, Kovner, & Shin (2010)
Psychological Traits		Twenge & Campbell (2008)
Technology	Stapleton, Wen, Starrett, & Kilburn (2007) Busch, Venkitachalam, & Richards (2008) Brody & Rubin (2011)	

Note. From *"Understanding Generational Diversity: Strategic Human Resource Management and Development Across the Generational 'Divide,'"* by A. Amayah and J. Gedro, 2014, New Horizons in Adult Education and Human Resource Development, 26(2), p. 39. Copyright by Wiley Periodicals Inc.

This debate is coupled with the agreement of many scholars that, whether generational identity is a reasonable and accurate social construct or not, not everyone aligns with their generational identities (Bencsik et al., 2016; Heyns & Kerr, 2018; Schullery, 2013; Tulgan, 2013). While the idea of workplace preferences being related to generational identity has been found

regularly in research, this topic is not yet firmly established enough within systemic literature to be considered resolved (Benson & Brown, 2011). Generations vary in length, and dates are a common inconsistency in the literature. Some claim generations are based on 40-45-year spans of time (Eversole et al., 2012) while others consider a generation to be 20-25 years and even as short as 18 (Lowell & Morris, 2019). The generational end is traditionally at the point that those individuals have reached adulthood, which is traditionally considered to be when that cohort begins having children (Akhavan Sarraf et al., 2017; Lowell & Morris, 2019).

2.3 Theoretical Framework

Several theories are referenced in the literature that could provide a framework for an improvement science-based intervention targeted toward management and staff satisfaction in the multigenerational workforce. This study is guided by one framework for content (generational theory) and a second framework for intervention design (Bloom's Taxonomy of Higher Order Learning).

2.3.1 Generational Theory (or Birth Year Cohort Theory)

For the content of study, two theoretical frameworks were potentially relevant: *organizational age theory* (Lawrence, 1988) and *generational theory* aka *birth year cohort theory* (Mannheim, 1953,1970; Strauss & Howe, 1991). Organizational age theory postulates that individuals' workplace behaviors, preferences, and decisions are related to life stages that correlate with an individual's age at a certain point in time (e.g., an 18-year-old in the workplace would

have certain values irrespective of the time period when they are born). Generational theory (also known as birth year cohort theory) as first established by Mannheim (1953, 1970) and further developed by Strauss and Howe (1991) postulates that people are grouped into categories based on significant historical events that occurred during critical developmental periods in their lifetime that shaped their worldview and persona and provide context from which the social construct of generations is built (Akhavan Sarraf et al., 2017; Dokadia et al., 2015; Eversole et al., 2012; Lester et al., 2012; Lowell & Morris, 2019; Twenge & Campbell, 2008). These events helped shape identities of the individuals born in a specific span of time and formulate their "peer personality" and consequently their work values and general organizational perspective (Eversole et al., 2012, p. 609) along with their work attitudes and learning styles (Lowell & Morris, 2019), their feeling towards authority and organization and ultimately how they respond to situations in various arenas (Akhavan Sarraf et al., 2017). Based on my own observations of my place of practice and conclusions of generation-specific differences and on the fact that generational theory is by far the most popular and widely accepted theoretical framework in this area I chose it to guide my research.

This theory is not without limitations, however, and these limitations are understood throughout the course of this Dissertation in Practice. As acknowledged by Berk (2013)

> Each generation is infinitely more complex than any single profile can reveal. The members of each generation comprise a fluid, messy, and diverse group, where a one-size-fits-all mold ignores their variability in skills, abilities, personalities, experience, socio-economic levels, ethnicity, nationality, gender, sexual orientation, and class. (p. 12)

This limitation is addressed in research by various sentiments regarding making conclusions that assume homogeneity of any generational group. This is especially true in an increasingly global workforce as, since generational localization is based on socio-political

economic and historical events, individual generational identities will be country specific (Dokadia et al., 2015, p. 81).

Despite these limitations, this theory is the most utilized and well-defended in the literature on the multigenerational workforce. It is one of the few theories that has been supported by large sample empirical studies including both longitudinal and time-lag studies, studies whose methodology allows for attribution of causation to generational identity by allowing for measuring people of the same age at different points in history (Hillman, 2014). Twenge and Campbell (2008) make an important note about generational classifications: "These are not stereotyping, but descriptions of how the average member of the young generation compares to the average member of earlier generations" (p. 863). Authors on the multigenerational workforce are careful to note that generational information provides context but does not trump the need for individualism or provide a sole source for drawing conclusions (Grubb, 2017; Zemke et al., 2013). Grubb (2017) describes generational differences as "clues" and "not promises" (p. 27). Zemke et al. (2013) encourage leaders to practice the "Titanium Rule[:]…do unto others keeping their preferences in mind" (p. 26). This framework provides a means for developing expectations in line with generational preferences, expectations that need to be questioned and developed through getting to know individuals. As stated by Akhavan Sarraf et al. (2017) "although the beliefs and behaviors of a generation are rarely uniform across all members, each generation is expected to display similar behavioral patterns that are similar among themselves but unlike the previous and subsequent generations" (p. 106). Generational identity is related to "a shared or collective field of emotions, attitudes, and preferences which have an impact on work-place attributes" (Dokadia et al., 2015, p. 81). However, we must remain careful in drawing conclusions on that information alone. As described by Benson and Brown (2011), generations are united by a collective memory,

based on experiences that unite their cohort, and in line with that which has influenced them during a distinct span of time: "many of the workers' values and attitudes towards work may be quite distinct from earlier generations of workers and, as a consequence, managers may need to take these generational differences into consideration to effectively manage their workforce" (p. 1844).

2.3.2 Bloom's Taxonomy for Teaching, Learning, and Assessment

After spending time researching my place of practice and studying and reflecting on the literature and even general information on both generational difference and on training, I saw a pattern evidenced that appeared to align well with that of Bloom's taxonomy. Bloom's taxonomy has frequently been deployed as part of training design (Biech, 2017; Dirksen, 2016). Bloom's taxonomy was first developed in 1956 with the categories of: knowledge, comprehension, application, analysis, synthesis, and evaluation. Each possessed subcategories that progressed from simple to complex and from concrete to abstract (Armstrong, 2010). Traditionally deployed in a classroom context, the revised framework consists of six major categories that proceed up a hierarchy of learning: remember, understand, apply, analyze, evaluate, and create. Depicted in Figure 3, this framework can be utilized to measure concept learning which makes it increasingly valuable for my study in the context of formal research. Bloom's taxonomy assists both the teacher and the learner in the development of objectives to give purpose to the educative experience and provides clarity on these objectives through providing an organized structure. For the instructor, following the taxonomy also assists in the planning of instruction, the design of tasks and assessment, and aligning these elements with the training and ultimate goals (Anderson & Krathwohl, 2001).

Bloom's Taxonomy

- **create** — Produce new or original work
  Design, assemble, construct, conjecture, develop, formulate, author, investigate
- **evaluate** — Justify a stand or decision
  appraise, argue, defend, judge, select, support, value, critique, weigh
- **analyze** — Draw connections among ideas
  differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test
- **apply** — Use information in new situations
  execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch
- **understand** — Explain ideas or concepts
  classify, describe, discuss, explain, identify, locate, recognize, report, select, translate
- **remember** — Recall facts and basic concepts
  define, duplicate, list, memorize, repeat, state

Vanderbilt University Center for Teaching

Figure 3. Bloom's Taxonomy

Note. From *Bloom's Taxonomy*, by P. Armstrong, 2010. CC-by-Vanderbilt University Center for Teaching.

While I did not see Bloom's taxonomy deployed in any literature on multigenerational management, my research on this topic suggested that the challenges of multigenerational management aligned well with the progressive skills of the taxonomy. Bloom's taxonomy is also a recommended training design with progressive learning in mind (Biech, 2017). As it relates to filling gaps in knowledge, skills, and application, evidenced in my research was the need for at least three things for organizations to successfully adapt to multigenerational difference, each of which is someway depicted in this theoretical framework: (1) knowledge of generational differences and similarities in workplace preferences, expectations, and values; (2) an established understanding that differences exist, they are likely to create conflict, and they are worth managers' time to address; and (3) an action orientation that takes known information and understanding and actively applies them to the workplace. Each of these areas aligns fairly directly with a stage of progressive learning as outlined in Bloom's taxonomy.

The progressive nature of the taxonomy also aligns well when dealing with a construct such as generations that often gets stuck on the initial level of remembering. Conversations around

generations center often around pop culture purported behaviors such as the lazy Millennial, and the technology-challenged Baby Boomer as well as information that would fall into the category of "remembering" the general "facts" that many people can articulate. However, not enough is known beyond the stereotypes to not only address the challenges brought forth by real difference but to even create competitive advantages. The supporting knowledge on this topic suggested that one of the solutions to addressing generational difference is developing understanding and finding similarities, thus progressing up the hierarchy. It was my belief that higher order knowledge could develop this ability.

In sum, my theory was that combining and deploying these two frameworks in the form of a management training would help progress managers' capacity to lead successfully in a multigenerational workforce. The intervention described in the chapter to follow was designed with this construct in mind.

3.0 Improvement Project

This chapter describes the training intervention conducted with supervisors within the Office of Admissions and Financial Aid at the University of Pittsburgh and its regional campuses. In studying both the literature and my place of practice, I saw evidence that management-related multigenerational workplace conflicts seemed to come from one of the three places that training had the capacity to address: (1) actual ignorance or lack of knowledge about each generation's preferences, expectations, workplace values, and communication styles and how they are evidenced at work; (2) a lack of enough empathy or understanding around any of those areas to motivate conversations and action planning around change (despite the length of time to address, or the difficulty in doing so); and/or (3) a failure to adapt or adjust practices or policies to the knowledge of what the generation desires.

My theory of improvement was that training had the capacity both to eventually ameliorate my organization's symptoms of generational misunderstanding (with a focus on reducing generational conflict) and to provide the resources that would allow us to turn our challenges into opportunities through realizing the numerous benefits of generational diversity in the workforce. This theory aligns with the research on the challenges of managing a multigenerational workforce and on the efficacy of training as a management development tool. In line with Bloom's taxonomy, each training module reinforced its predecessor to help develop higher order learning. This chapter describes in detail the intervention including its development and execution and the associated measures and methodology that were utilized to assess its impact. It concludes with a discussion of the potential limitations of the selected approach.

3.1 Theory of Improvement

In developing the theory of improvement that guides this intervention, I conducted research on management, generational workplace diversity, multigenerational management, and training. My theory is based in two conclusions evidenced both in research and in my experience as a practitioner: (1) the manager is critical to the success or failure of any organization and (2) the legitimacy of generational cohort theory in determining workplace identity and preferences. As described in the previous chapters, it is evident that management will become increasingly challenging as more generations enter the workforce. Within improvement science, there are identified drivers that act upon one another to impact an organization's ability to accomplish their goals. These drivers often create the challenges that an intervention applied via a Plan Do Study Act (PDSA) cycle seeks to correct.

In designing an intervention intended to, in the long-term (after several PDSA cycles), both reduce conflict and create a more positive working environment, extensive research has shown it is most productive to start with developing managers, the individuals who play the most critical role in employees' satisfaction with their organization (Clifton & Harter, 2019). Managers with the strongest positive feedback from their staff have been shown to have less turnover, and retention has been found to correlate more strongly to the manager than it does to the staff members' seniority, performance, tenure, or promotions (Pollak, 2019). In general, however, most people are not just naturally strong managers. According to Clifton and Harter (2019), "about half of great managing is rooted in hard wire tendencies, and the other half comes from experiences and ongoing development" (p. 120). The active role of generations in the workplace was also well evidenced in both practice and literature often noted as being only one element of identity but one

that is critical for leaders to both adapt to and acknowledge (Grubb, 2017; Pollak, 2019; Zemke et al., 2013). Figure 4 provides a pictorial depiction of my summarized theory of improvement.

LONG TERM AIMS	SHORT TERM AIM (Goal within the duration of a single PDSA cycle)	PRIMARY DRIVER	SECONDARY DRIVERS	CHANGE IDEA	PROBLEM OF PRACTICE
Reduced Dysfunctional Conflict + Increased Functional Conflict Improved Staff Satisfaction Reduced Turnover	Multigenerational management training will build potential for stronger managers of an age-diverse staff, as assessed by improvement on a pre-post-test assessment	Supervisor Management Styles	Managers' limited <u>knowledge</u> of generational preferences, expectations, communication styles, and values Managers limited <u>understanding</u> of why generational traits exist Managers limited <u>application</u> of knowledge and understanding to their leadership, policies and practices	"Cross-generational management" training	Many managers within the University of Pittsburgh's Office of Admissions and Financial Aid are not yet prepared to successfully supervise an increasingly complex, multigenerational, workforce.

Figure 4. Theory of Improvement

3.1.1 Change Idea: Cross-Generational Management Training

Despite having a workplace culture that values professional development, training for supervisors was a tool not yet engaged by my place of practice. This situation is not unique for our field. In admissions we often rely on short periods of training, often no more than two weeks (Hodum & James, 2010), despite regularly hiring recent college graduates (Barnds, 2009), which now include or are predominately Millennials and Gen Z who are less likely than previous generations to have had prior work experience (Pollak, 2019). This makes it even less safe to assume staff are prepared to manage without training. It also should not be assumed that more senior managers have the training they need. Leadership techniques of the past were designed for

the workforce of the past. Although once effective, top-down leadership does not meet the demands of Millennials and Gen Z for coaching and collaboration (Clifton & Harter, 2019)

However viable, this adjustment would be a deviation from our industry. In an international study, Johnson (2002) concluded that in academia, management training is less formalized and is instead a skill learned over time through practice. Managers in academia develop gradually on the job through "incremental involvement in management tasks," through being "coached by peers and senior manager-academics" and through "critical reflection and conversation" (Johnson, 2002, p. 49). While the study was many years ago, I can say after almost a decade as a practitioner in higher education, it seems that little has changed.

Unfortunately for our industry, expectations for managers have changed; unlike previous generations, Baby Boomers in particular, generations no longer just accept the managers they have. There is no stigma around changing jobs or being publicly vocal about poor management, which further impacts an organization's ability to recruit talent (Pollak, 2019). Millennials are highly networked and less likely to go through traditional methods to learn about a workplace or its culture and are more likely to turn to relationships. This means managers no longer get to control the narrative about their organization; managers must be good managers (Clifton & Harter, 2019). All that being said, as evidenced by the literature, training is one area that could potentially positively impact many of the other challenges faced in our field and one where the initial impact could begin to be realized in the short-term duration of my study.

3.1.2 Training Development

Research has shown that training is viewed differently by different generations (Grubb, 2017; Shaw, 2013). The combination of traits and preferences, along with specific perspectives on

training, can make building a training specifically designed for multiple generations even more complex and provides the foundation for my decision to study literature not only on training, but also the needs of the different generations within the workforce. As such, the intervention designed for this research was modeled based on insight on training provided by Dirksen (2016) and Biech (2017) in conjunction with research on each of the generations and their preferences within a training environment primarily as described by Cappelli and Novelli (2010), Grubb (2017), Pollak (2019), and Shaw (2013). The process for developing this intervention is outlined in Figure 5.
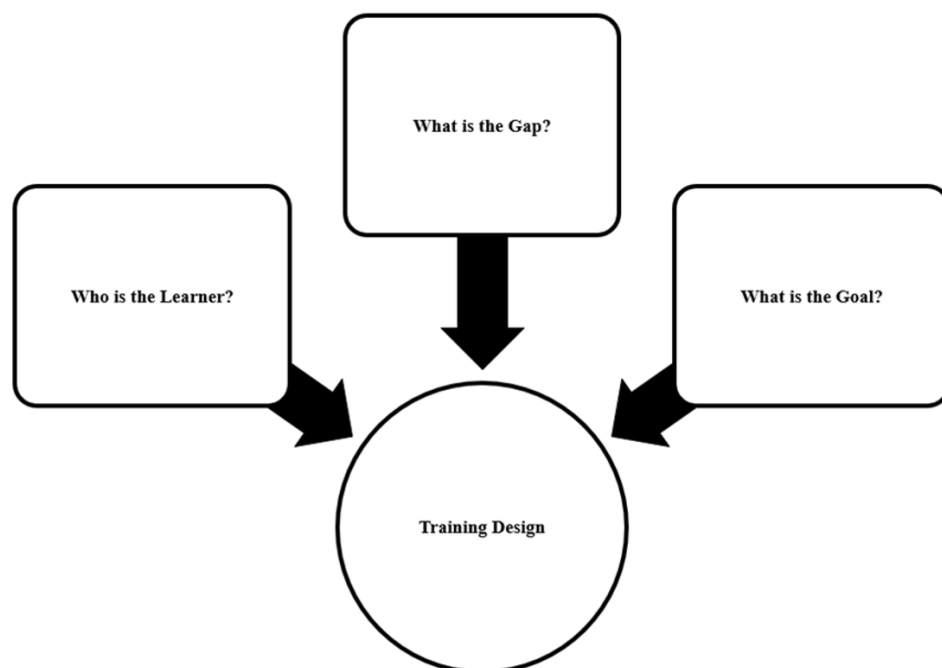
Figure 5. Components Considered in Designing Training

Note. Adapted from Design for How People Learn by J. Dirksen, 2016, New Riders. Copyright 2016 by Julie Dirksen.

3.1.2.1 Who is the Learner?

Biech (2017) describes asking the question, "Who is the learner?" as the first phase of training development. Dirksen (2016) gives several facets of who a learner is, including a set of types, sources of motivation, and skill levels. I inserted into this discussion the training preferences

of the varied generations (primarily as described by Grubb (2017), Pollak (2019), and Shaw (2013)) and a personal knowledge of the learners within my specific place of practice. Dirksen (2016) describes seven types of learners: (1) the "Just tell me what I need to know" learner, (2) the "Hey! This is cool!" learner, (3) the "I need to solve a problem" learner, (4) the "This is a required course" learner, (5) the "Oooh, shiny!" learner, (6) the "I fear change" learner, and (7) the "I pretty much know all of this already" learner. Learners are also often either intrinsically or extrinsically motivated to learn (Dirksen, 2016). This dichotomy exists in generations as well. For example, Baby Boomers are known for being particularly intrinsically motivated (Dokadia et al., 2015). Adult learners, specifically, want to know why what they are being taught is important and relevant, they want their experience acknowledged as part of the process, and they want to know how learning what is provided will make their roles easier (Biech, 2017). Generations too have varied degrees of emphasis placed on the importance of relevance, their involvement, and practicality in training.

I chose to focus my training on the populations I was most concerned about impacting and those I was most aware were present in my place of practice: (1) the "I need to solve a problem" learner, (2) the "This is a required course" learner, and (3) the "I pretty much know all of this already" learner. I attempted to incorporate elements for those both intrinsically and extrinsically motivated to learn since both were clearly represented. This knowledge informed my training design, which needed to include: (1) opportunities to engage and learn from doing, (2) evidence that the material was useful and applicable, (3) not too much "intro material," and (4) multiple moments of dissonance created by novel or unexpected material. For the intrinsically motivated, I asked questions and gave opportunity to provide insight (Dirksen, 2016). For the extrinsically motivated (who I suspected to represent the majority), I was careful to connect the information

from the training to actual issues (Dirksen, 2016) from our workplace and to multigenerational conflicts. I gave learners the opportunity to identify conflicts actually experienced in our workplace and even to provide scenarios to be discussed by the group, which aligned with Dirksen's recommendations, and my own personal knowledge of what garners interest. The variety of generations also informed the need to incorporate multimedia. As established in the literature, for a multigenerational training to be effective, it must provide for a variety of learning styles and be distributed via multiple mediums; incorporating a combination of videos, exercises, Live Q&A, homework, and quizzes is encouraged (Grubb, 2017). Pollak (2019) seconds these recommendations by arguing that utilizing a wide variety of media allows training to meet the imperative of accessibility.

3.1.2.2 What is the Gap?

Both Biech (2017) and Dirksen (2016) challenge trainers to consider where the gap is for the population of learners. Dirksen (2016) specifically suggests six potential areas where gaps may be present: knowledge, skills, motivation, habits, environment, and communication. Based on the research described in Chapter 1 specific to my place of practice and in Chapter 2 specific to training for multigenerational management, the gaps present and critical for this intervention were in the areas of knowledge, skills, and motivation. As described by Biech (2017), "adults learn because they want or need to" (p. 18). The goal of my research and the intervention was to establish both desire and need. Whether or not it is realized, we are now in a new working environment where generational cohorts are no longer isolated by level or title, and managers are being held to the "Titanium rule[:]…do unto others' keeping their preferences in mind" (Zemke et al., 2013, p. 26). To do this, managers must know what the preferences are, be able to adapt, and be willing to adapt.

In line with the identified gaps, the training was designed to dedicate time for both exercise and conversation to understand what learners thought they knew versus what they actually knew. I also took recommendations and followed my own known best practices regarding the necessity of providing opportunities to discuss and engage with peers (Biech, 2017). Related to skills was also committed to developing skillsets in multigenerational management applied specifically in the context of the organization. This provision of context was one component of attempting to address motivation in addition to an articulation of value in the context of articulating both the risks and benefits of being strong multigenerational managers not only in the context of immediate performance but also within the future.

3.1.2.3 What is the Goal?

My ultimate goal, as previously depicted in my theory of improvement (Figure 4), was that managers would be better equipped to successfully manage multigenerational staff toward the long-term end of reduced conflict, improved staff satisfaction, and reduced turnover. Improvement on a measured assessment, both as shown definitively by scores and as self-assessed, served as a more immediate measure of training success. As noted by Biech (2017), "training is a method to enhance performance" (p. 21). The goal of improvement science is to be iterative, and a single instance of improved performance is not sufficient. Getting managers to the place where they could "successfully" manage multiple generations would require many to make behavioral changes and, for some, to even change mindsets. This would be defined as a slow skill, which is essentially something on which training will have a small immediate impact on the ultimate goal (Dirksen, 2016). To approach slow skills Dirksen (2016) recommends:

1. Finding easy ways to make immediate impact—providing job aids, models, tools, etc.
2. Providing concrete material that will need to be adapted over time.

3. Understanding it will take time since mindset changes do not happen quickly.
4. Determining if the changes can align with individuals' foundational elements, culture, and personality. (p. 77)

Elements of the training design related to who the learner "is" took each of these distinct factors into account. Knowing my organization, I knew it was important to approach the training with the goal of changing mindsets. , I focused on the foundational elements of individual awareness through the assessment of self-competence. It was important that the learner could measure for themselves where they started and where they ended up after the training irrespective of any numerical score on the knowledge assessment.

3.2 Final Managerial Training Intervention

Considering these various elements, the final intervention consisted of two trainings and three modules, one for remembering, one for understanding, and one for applying. I originally intended to have a session for each module; however, extending the training by a week would have decreased the number of potential participants. Two managers were slated for late January/early February paternity leave. Each component was tailored toward a critical element of developing strong multigenerational managers. This approach was modeled after Bloom's revised taxonomy for content mastery as developed by Anderson and Krathwohl (2001) and aligned with literature on training and on multigenerational management. To reiterate, there is to date little formal academic literature on the specific combination of generational management training and the application of Bloom's taxonomy. However, Bloom's taxonomy is often used in training design given its ease of use and ability to allow the training facilitator to clearly align objectives (Biech,

2017; Dirksen, 2016). Biech (2017) advocates for the use of Bloom's taxonomy while Dirksen (2016) favors more flexibility than that offered by a standard progression.

All modules were conducted virtually via Zoom for an hour each and included materials for additional study. Since the Office of Admissions and Financial Aid is working remotely due to the COVID-19 pandemic, a virtual training was the only available approach. This was not necessarily the approach I would have chosen if given an option particularly with the desire to promote active engagement across generations. Online learning formats do offer some benefits, however, including time savings, convenience, ability to be tailored, cost savings, and expanded reach (Biech, 2017). According to Biech (2017), evidence has also shown that online classes were at least as effective as traditional classrooms if designed effectively. One additional benefit is that learning done in the same context as application is considered training best practice (Dirksen, 2016). However, in my experience, online delivery also greatly increases the risk of what Biech (2017) refers to as the "multitasking muddle" concluding that "learning that happens while multitasking cannot be generalized and does not result in an understanding or ability to recall when needed" (p. 162). The risks and the results may be tied to virtual environment, which is a notable limitation.

3.2.1 Design Components

As can be seen, many factors contribute to decisions for training design. Biech (2017) articulates one knowledge model to consider, the Conditions of Learning, developed by Gagne et al. (2005), a central body of knowledge that provides a basis for training. While this did not formally guide my training development, I did audit my design against the instructional events, suggested by Gagne et al. (2005), as I am not a training professional, and it was suggested by

Biech (2017) that applying these events "ensure(s) that learning will occur" (p. 17). The recommendations and my actions were as follows:

- Gain the learners attention. (Generational photo recognition).
- Share the objectives of the session. (Shared at the beginning of each training, learning to recognize and address generational conflict to be successful multigenerational managers).
- Ask learners to recall prior learning. (Pilot training-built word clouds, official training: asked for recall about generation specific conflicts and to engage in true or false activity, discussing any surprises.)
- Deliver the content.
- Use methods to enhance understanding. (Used case scenarios, diagrams, conflict matrix)
- Provide an opportunity to practice. (Group case scenario discussion and conflict matrices)
- Provide feedback. (Debrief and discussion after each activity)
- Assess performance. (pre-test and post-test Qualtrics assessments)
- Provide job aids or references to ensure transfer to the job (handouts with 3 Cs of multigenerational workforce conflict, Shaw's 5 Steps for Leading Through Generational Differences, generational context sheet)

I considered in my approach, my learner, the gap I was addressing, and the goal I was hoping to accomplish.

In sum, the designed intervention consisted of the following: a quantitative pre-test assessment; two, one-hour, virtual trainings, with three modules; a quantitative post-test assessment; and an optional post-intervention survey. The pre-test established baseline knowledge, the training modules provided education toward remembering, understanding, and application of learned knowledge. The post-test assessed if the training improved performance (via pre- and post-test analysis and the use of Cohens d to establish any statistically significant change in scores), and the post-intervention survey was utilized to gauge efficacy of the training as perceived by participants. It was also intended to aid in the development of future PDSA cycles. An in-depth description of these components is described in my measures and methods section that follows. Figure 6 depicts the final design:
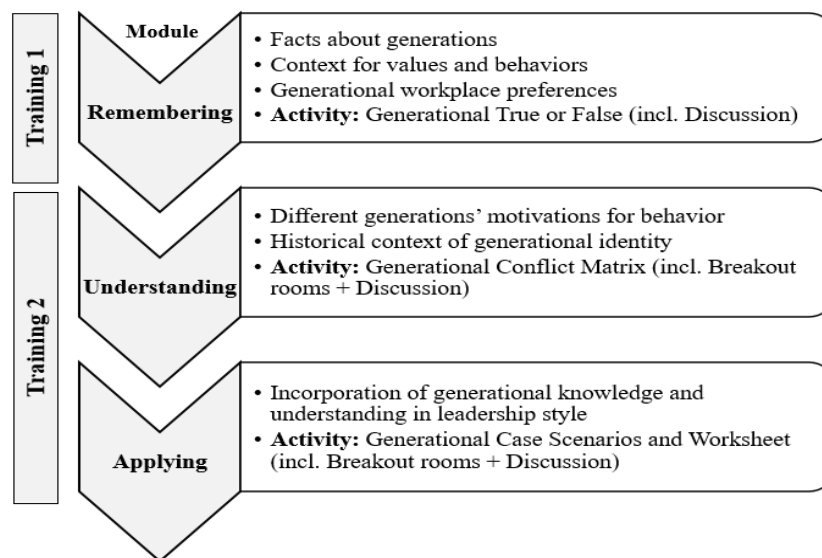
Note. Module progression adapted from Bloom's Taxonomy of Higher Order Learning

Figure 6. Managerial Training Intervention Design

3.2.2 Training Modules

A module-based design is considered "chunking," which is a process recommended for making information easier to process and remember (Biech, 2017; Dirksen, 2016). Breaking the content into multiple modules is also recommended as information is also best distributed over time (Dirksen, 2016). As described by Pollak (2019), the effectiveness of this approach to training in a virtual landscape was proven effective by the financial services company, Citibank, that developed a multi-modal virtual training program that allowed both for collaboration and self-pacing. This training design helped the learning to be both consistent and convenient and one which "sustains learning over a longer period of time" (p. 151). To allow for continuous training, supplemental information to the training was provided for additional review following the training and both prior to and following the second training. This approach aligns with the Create Once

Publish Everywhere (COPE) model, which "remixes" training and information dissemination in such a way that addresses learning style differences prevalent in organizations (Pollak, 2019) and with the encouraged use of "job aids," which are tools that allow for practice following any formal training (Biech, 2017; Dirksen, 2016). Job aids were incorporated into my training through the distribution of handouts, worksheets, and copies of the PowerPoint presentation. Provided information specifically included fact sheets, answer guides, a generational conflict matrix, Shaw's (2013) *Five Steps for Leading Through Generational Differences* , and a guide developed through my research the three Cs for managing cross generational workplace conflict.

For training to be effective, participants must be motivated to retain the information. The first module provided information on the value of training to give staff a reason to work to retain the information in the study. Most people will not simply give the benefit of the doubt that information is important to them; the facilitators must pique their interest, particularly in cases of time or resource restraints (Dirksen, 2016), which is certainly the environment we are placed in amid pandemics. The second module focused on skill development and placing learned information from the first module into context. Information applicability is also critical to learning (Dirksen, 2016).

3.2.2.1 Training One, Module One: Remembering

Utilizing an interactive generations true or false activity, which I delivered first unsuccessfully via an online quizzing platform and then as a PowerPoint where participants were asked to type their answers in the chat, the first module focused on the establishment of generational facts and figures both in general and within the workplace. This corresponds to the "remembering" stage of Bloom's taxonomy where learning involves the ability to recall basic facts and general concepts. As described in the context of training by Dirksen (2016), the first stage of

learning is recognition, followed by recall, then integration and use. This module focused on establishing knowledge beyond factual recall to begin the process of understanding, the second stage of the taxonomy.

The remembering component of my training involved providing and collecting—it is critical for facilitators to also take on the role of learner (Dirksen, 2016)—general information on generational characteristics (noting, to reduce the likelihood of stereotyping, that these are generalizations and will not apply to all staff). While it began with the provision of information, this portion of the training also asked learners to consider prior knowledge about generations as part of the introduction. Identifying from learners what they believe they know to be true helps them to figure out what information they have already retained about a topic and where they would put new information (Dirksen, 2016). In line with this, I sought to focus on components that were surprisingly true or surprisingly false as opposed to traditional generational stereotypes (e.g., despite their reliance on and grasp of technology, Gen Z prefers face-to-face communication with managers in the workplace (O'Boyle et al., 2017)), which allowed me to introduce recommended elements of surprise and dissonance (Dirksen, 2016) to pique the interest of an educated group of learners, particularly those managers with extensive experience, a curiosity Biech (2017) notes is valuable for engaging learners. The timing of this activity was critical; as articulated by Dirksen (2016), it is hard to get learners to pay attention to information they think they already know. There is immense value in understanding individual generations, what they value, and the various places where they tend to come apart, areas which include: communication, decision making, dress code, feedback, fun, knowledge, transfer, loyalty, meetings, policies, respect, training, and work ethic (Shaw, 2013). This component primarily focused on a popular subset of these differences: communication, feedback, policies, loyalty, and work ethic.

3.2.2.2 Training Two, Module Two: Understanding

The second module of the training sought to move knowledge to understanding and provide tools for application via group discussion on generational conflict. I intentionally sent participants into multigenerational breakout rooms noting that understanding is often developed through authentic relationships. As is true even outside of work, people tend to gravitate toward and spend time seeking to understand those people who are like them (Cappelli & Novelli, 2010), and the breakout rooms were used to break down generational silos. The format of this module was also intentional, because social interaction is a terrific way to solidify learning, particularly when groups are given a concrete purpose to accomplish together (Dirksen, 2016).

Groups were tasked with identifying a generational conflict(s) they had experienced in the workplace and placing them on a conflict matrix I developed based on the type of generational conflicts I saw referenced in literature and have witnessed within my place of practice (see Figure 7).

Figure 7. Typology of Generational Conflict at Work

The goal was to help participants recognize the variety of generational conflicts that exist in the workplace and their complexities, which further solidified the value of the information to assist in retention and to increase learner motivation, providing relevance for some learners, providing opportunities to provide insight for others, and promoting discussion and collaboration.

3.2.2.3 Training Two, Module Three: Application

The finale module again broke participants into multigenerational groups. Participants were provided with context-specific generational conflict scenarios. They were asked to discuss the conflict scenarios and utilize any of the provided job aids as support. Participants were also encouraged to keep the context of what was learned about each generation in mind, and to speak up for their own generation as relevant and appropriate. In the event that the scenario being

discussed related to a generation not represented in the group, participants were given handouts describing what research suggested the likely response of each generation would be in the scenario. Participants were provided with a worksheet (see Figure 8) to complete as a means of putting the learned techniques to practice and as an application takeaway for the future. Each of the scenarios were built on either a situation that had occurred (participants were asked to provide personal examples in advance) or would be likely to occur in our place of practice specifically to increase relevance and engagement.

ACCOMODATING GENERATIONAL DIVERSITY @ WORK

Worksheet

SCENARIO: Your Gen Z staff member is very creative and likes to work through new ideas late in the evening. Often, they reach out to discuss their thought process, or to get your opinion on something, but it is never during what you would consider working hours. They are frustrated that you seem inaccessible, you are frustrated that they do not seem to respect working hours and your time at home.

	Supervisor Generation: X	Supervisee Generation: Z
ACKNOWLEDGE	Characteristics supervisor exhibits of their generation (contributing or conflict catalysts) Work-life balance is critical	Characteristics supervisee exhibits of their generation (contributing or conflict catalysts): Believe 9-5 is an outdated practice and work can be done any time (technology= constant access)
	Evidence of these characteristics in scenario: Committed to being away from phone/computer from 5 to 8 pm	Evidence of these characteristics in scenario: Does not appear to log-in at the same time every day but can be counted on for a late- night text with lots of questions
APPRECIATE	Why might staff member work this way: Used to being constantly connected via technology, flexibility seems simple	Why might supervisor work this way: Wants to be there for their family in a way that was not possible for them growing up
FLEX	What can be done to accommodate differences? Decide on projects where Gen Z staff member feels confident to work independently and encourage them to work on these when working outside of standard work hours. Offer to do quick check-ins first thing in the day, so work done at night can get a "quick response" without that having to occur during your family time	

Reference:
Shaw's Five Steps for Leading Through Generational Differences
Shaw, H. (2013). *Sticking points: How to get 4 generations working together in the 12 places they come apart.* Tyndale House Publishers, Inc.

Figure 8. Worksheet for Accomodating Generations at Work Exercise

Participants were encouraged to approach the content as they were comfortable either utilizing discussion or role play. Participants were asked to evaluate the scenarios from the perspective of both the individual in the supervisory role and the individual being supervised and to not only think about the conflict but also why it might be occurring based on what they had learned or known previously about each generation. While they could use any tool provided,

participants were particularly encouraged to engage Shaw's (2013)\ *Five Steps for Leading Through Generational Differences* : acknowledge, appreciate, flex, leverage, and resolve.

While Shaw's approach was the only one formally incorporated into the training, participants were also given another potential methodology toward addressing generational conflict in the workforce. Inspired by Shaw (2013, 2020) and his five-part process for addressing what he terms generational "sticking points" in the workplace, I developed the Three Cs of Cross-Generational Workplace Conflict (Figure 9). In reflecting on my own research, it was clear methods for addressing these conflicts, need to be considerate of the reasons multigenerational workforce management is challenging, how these challenges end up as conflicts, and how those conflicts can be made functional, allowing the organization to realize the benefits of generational diversity.

In reviewing the characteristics of the various generations and how they are reflected in the workplace , I developed three categories for each of the four generations represented in my workplace: 1. Contributing characteristics, 2. Conflict catalysts, and 3. Cohesion creators. I used alliteration and the number three intentionally to increase likelihood of retention. The lists of characteristics were developed by looking at the descriptions of each generation as depicted in various sources (Al-Asfour & Lettau, 2014; Berk, 2013; Cappelli & Novelli, 2010; Cekada, 2012; Clifton & Harter, 2019; Dokadia et al., 2015; Gibson et al., 2009; Grubb, 2017; Lewis & Wescott, 2017; Lowell & Morris, 2019; O'Boyle et al., 2017; Rickes, 2016; Seemiller & Grace, 2017, 2018; Shaw, 2013, 2020; Underwood, 2007) and characterizing them into one of these three areas. The concepts of conflict contributors and cohesion creators were further developed through my understanding of the approaches to multigenerational management put forth by Pollak (2019), Grubb (2017), Shaw (2013,2020), Underwood (2007), and Zemke et al. (2013).

Contributing characteristics are positive workplace values each generation may bring to the workplace. As noted by Grubb (2017), one of the biggest challenges in a generationally diverse workforce is that "employees of any age rarely appreciate what other generations have to offer and instead approach each other with preconceived notions about how an employee of a certain age behaves" (p. 127); thus, designating the differences of each generation as contributing was intentional in suggesting a need for appreciation. Conflict catalysts are the "negative" attributes that generation may bring. And, finally, cohesion creators are the approaches to the different generations that the literature suggests managers can take to get that generation to be satisfied, engaged, and to positively contribute.

3

Cs of Cross-Generational Workplace Conflict*

*Note: These statements are generalizations based on generational membership. The best approach to managing diversity of any kind is always getting to know the characteristics and preferences of each individual

Baby Boomers @ Work
BORN 1946 -1964

CONTRIBUTING CHARACTERISTICS
- Driven
- Hard working
- Relationship Builders

CONFLICT CATALYSTS
- Self-centered
- Defensive to critical feedback
- Stubborn around use of technology

COHESION CREATORS
- Treating them as valued
- Seeking their mentorship and guidance
- Providing them with opportunities to contribute to success

Generation X @ Work
BORN 1965 -1980

CONTRIBUTING CHARACTERISTICS
- Adaptability
- Independence
- Creativity

CONFLICT CATALYSTS
- Skeptical
- Impatient
- Practical

COHESION CREATORS
- Freedom to get things done their way
- Focusing on creating efficiencies
- Giving them opportunities for work-life balance

Millennials @ Work
BORN 1981 -1996

CONTRIBUTING CHARACTERISTICS
- Multitasking
- Technological Savviness
- Collaborators

CONFLICT CATALYSTS
- Demand for constant feedback
- Need for structure and supervision
- Expectation of recognition and promotion

COHESION CREATORS
- Clear paths to promotion
- Creating opportunities to have an impact
- Provide opportunities to work with strong teams

Generation Z @ Work
BORN 1997 -2010

CONTRIBUTING CHARACTERISTICS
- Entrepreneurial spirit
- Independent Problem Solving
- Focus on Greater Good

CONFLICT CATALYSTS
- Expectations misaligned with level of experience
- Risk-aversion
- Push -back against standard norms

COHESION CREATORS
- Providing a sense of purpose
- Recognizing and adapting to diversity
- Being flexible

Figure 9. The Three Cs of Cross-Generational Workplace Conflict

3.3 Practice Presentation and Pilot Study

In addition to practicing the training to improve delivery, I also conducted a full pilot study. To help ensure the likelihood that the modules would achieve their intended objectives and measure what was intended, individuals external to my office including one member of my dissertation committee were sought out to evaluate the clarity of the pre-and post-testing tools and the efficacy of the training. I planned to recruit five to six evaluators, recommended by Dirksen (2016), as the industry rule of thumb for testing an online digital resource. I also sought to involve multiple generations in the pilot study as involving a multigenerational audit team is highly recommended for assessing a training prior to deployment (Shaw, 2013).

3.3.1 Practice Presentation

Both my own experience as a presenter and the literature confirmed the value of practice. Biech (2017) and Dirksen (2016) both articulate facilitator practice as critical to trying, and Biech (2017) describes the facilitator's practice as having a direct impact on participant engagement. To practice virtual delivery, first half of my potential intervention was rolled out in November with the assistance of my committee member, Dr. Ray Jones. He allowed me to incorporate my training into a session he was conducting on workplace civility for sixty members of the University of Pittsburgh's Certificate Program for Organizational Leadership and Ethics (COLE). This initial deployment was to practice the training material including the delivery via Zoom, the technology, the execution of the activities, the timing, and allowed my committee member to provide critical feedback. Participant feedback was not a component of this pilot (though I did receive some feedback via the Zoom platform's chat and in follow up emails that the training was "enjoyable,"

"very helpful," "discussed a truly relevant topic.") Based on his observation, Dr. Jones was able to recommend changes to delivery (deploy an alternative approach for the true and false component), the presentation (slide content needed overhaul, more information, specific information on generation birth years, new photos, additional context), and ways to condense the delivery (materials sent in advance instead of being posted in the chat).

3.3.2 Pilot Study

After considering this feedback and making alterations to the content, I conducted the full training formally as a pilot training in the first week of January with the multigenerational staff of a Pittsburgh based non-profit. For this component, participants were asked to complete the entirety of the training including a pre-assessment, a post-assessment (see Appendix F), the two-part training, and the optional, post-training survey. I was able to recruit 12 participants, nine of whom participated in the intervention in its entirety and four of whom completed the post-survey. Baby boomers, Gen X, millennials, and GenZ were all represented in the pre-test survey. Gen X, millennials, and GenZ were represented among the final participant group (two Gen X, five millennials, and two Gen Z). These population demographics were at least somewhat similar to my target population, which was helpful. While the population was not large enough to draw conclusions utilizing descriptive statistics, I did evaluate the survey questions for understanding by reviewing changes in responses before and after the training, particularly focusing on those areas where individuals got a response correct before the training and incorrect afterwards and where a selection of every answer of the multiple choice meant confusion with the question (see Appendix G for the revised assessment). The results are depicted in Table 3.

Table 3. Evaluation of Training Impact on Assessment Performance in Pilot Study

Question	Status for the majority	Assessment
4	Correct after training, wrong before training	Training produced growth
7	Correct after training, wrong before training	Training produced growth
9	Correct after training, wrong before training	Training produced growth
13	Correct after training, wrong before training	Training produced growth
2	Correct before training, wrong after training	Training and question not aligned or question misunderstood
6	Correct before training, wrong after training	Training and question not aligned or question misunderstood
11	Correct before training, wrong after training	Training and question not aligned or question misunderstood
12	Correct before training, wrong after training	Training and question not aligned or question misunderstood
1	Correct both before and after the training	Impact of training not observable
3	Correct both before and after the training	Impact of training not observable
8	Correct both before and after the training	Impact of training not observable
14	Correct both before and after the training	Impact of training not observable
5	No majority, four different responses	Uncovered in training or question confusing
10	No majority, three different responses	Uncovered in training or question confusing

Based on these responses and some revisions for clarity I made edits to questions 5, 6, 8, 10, 12, 13 and 14 and enhanced the training components for the topics addressed in questions 2 and 11. In addition to evaluating the results of the pre- and post-test assessments, I collected feedback over the phone from three of the nine participants who participated in both trainings and both assessments (two millennials and a self-identified Gen X/baby boomer cusper, born in 1965). I also reviewed the survey data. The survey was completed by four participants only one of whom was also an individual I collected feedback from via phone, which allowed for a total of six participants to complete a full evaluation of the process. Through the phone conversations, I collected detailed feedback on each of the three activities of the training, the presentation, the assessment, and the training overall. These data are depicted in Table 4.

Table 4. Evaluation of Training Components in Pilot Study

Training Component	Feedback
True and false activity	Needed five more seconds on true or false questions
	Menti was enjoyable
Breakout discussions	Wanted enough time to discuss what was agreed with and disagreed with about generations
	More time for instrospective work
	More time for participants to share their perspectives
	More opportunities to "question current norms"
Role-playing/case scenario	Wanted to do more work with how members of the team had observed the scenarios in action
	This presented a "great opportunity for team to gain greater insight into one another" , if time had allowed
	Appreciated them being placed into the specific context of the organization, however, felt this led older/more experienced staff to believe "they already knew the answer", reduced opppotunities for discussion
Assessment	Assessment was easy to understand
	Length of assessment was good
	Random ID was hard to recall between pre- and post-assessment
	Assessment matched well with the content of the true and false, "was not able to glean as much from the true and false"
Presentation	More diversity of race in Powerp\Point photos
	Include the years represented by the generations and their ages today (not sure what generation co-workers are in but do know their ages)
Overall	Session could have been "2.5 hours"
	"(Facilitator) energy was great, clearly well-educated, well-spoken, felt facilitator could have kept group attention for longer"
	Appreciated the notes that "people do not existed in generational vaccums"
	Desire for more discussion about who is currently represented in generational research
	The "value of the study to me as a professional was very important and much better articulated in second session"

Reviewing the survey data allowed me to supplement the phone conversations with quantitative data to evaluate which specific components of the assessment may require improvement or enhancement before formally beginning the intervention. These data are depicted in Tables 5 and 6.

Table 5. Most Effective Training Components in Pilot Study

Most Effective Training Components (N=4)

Training component	Example Quote	Frequency, n (%)
The PowerPoint presentations	"the examples cited provided a lease of generational difference"	4 (100%)
Learning new information	"I believe we think generally about this "those Millennials!!!" but having the characteristics and historical context may help us understand more of the why behind people's requests or work preferences."	4 (100%)
The reference guide	"The information was useful, had some surprising insights, and will definitely help as I manage three different generations of staff members".	4 (100%)
The facilitation (style, delivery)	"Having examples (or at least names - Departments, software associated with our work) that were drawn directly from our work was great and made the conversation very engaging."	4 (100%)
The group work	"the role play and group discussions were productive and illuminating" "discussion helped us to identify areas of possible bias and stereotyping and am sure will cause us to think more deeply"	3 (75%)
The frequency (twice)		2(50%)

Note. Participants could give multiple answers, and were given the option to "select all that apply". No respondents gave a single answer.

Table 6. Least Effective Training Components in Pilot Study

Least Effective Training Components (N=4)

Training component	Example Quote	Frequency, n (%)
The length of time (1 hour each, 2 hours total)	"we definitely could have used more time" "Perhaps a 90 minute session the second day too (sic) allow for more scenario role play . I thought 10 minutes was insufficient."	3 (75%)
The frequency (twice)		1 (25%)

Note. Participants could give multiple answers, and were given the option to "select all that apply". All four participants selected one least effective component.

Based on their assessment results and post-study conversations with three staff members, two millennials, one Gen-X/baby boomer cusper (born 1965), and Dr. Jones, I was able to develop the final intervention, which I rolled out to my target population in mid-January.

3.4 Participants and Recruitment

The proposed study was introduced via a formal meeting arranged by the Vice Provost for Enrollment at my place of practice following a recommendation of utilizing authority to validate the importance of participation. In line with suggested research protocols and reducing undue pressure to participate (although obviously still present given formal support of the VP), the official request for participation (see Appendix D) was distributed by my faculty mentor on my behalf. The Institutional Review Board (IRB) rendered this study exempt, so formal obtaining of consent was not required. However, the request for participation included a thorough reiteration of the purpose of the study including any potential benefits or risks to participation and an

opportunity to cease participation at any time. Participants indicated their agreement to participate through completion of the pre-test assessment, which was included in the recruitment email. Eligible participants included anyone meeting the following criteria, which allowed for approximately 45 potential participants:

- Employed in the Office of Admissions and Financial Aid at the University of Pittsburgh or at one of our regional campuses (Bradford, Johnstown, Greensburg, and Titusville)
- Presently supervises staff or is in a supervisory role, as indicated by their job description, whether or not they presently supervise staff.

Due to the need to have a minimum of 30 participants to meet the power threshold required for quantitative research, I had to make certain exceptions to the selected population that were not ideal and could be considered limitations. First, it is not recommended to include supervisees in one's own research; however, this would have reduced my potential study population by five staff, leaving me with only 40 eligible participants. I felt comfortable moving forward since participation was entirely voluntary and anonymous. Second, the problem of practice was found to be imbedded within my place of practice and was not formally evaluated to exist at our regional campuses. I attempted to address this by asking that they participate if they believed the subject matter of the training to be relevant to their context, and each participant volunteered via email that they saw the value based on their own environments. Finally, I had to be flexible in all areas including supervisory status since, in the six months prior to the date of my training, we lost 10 staff, five due to turnover and five due to the University of Pittsburgh's Staff Early Retirement Program (SERP) (implemented in response to COVID-19). This turnover altered both the number of eligible supervisors and the number of individuals who remained in a supervisory capacity and again would have placed the threshold at risk. Thirty-six individuals participated in the first training, 37 participated in the second, 32 completed the pre-and post-test in their entirety, and 30 assessments were rendered complete and eligible for the study (see Table 7).

Table 7. Study Population

Demographic Characteristics of Training Participants

Characteristic	Pre-test participants		Post-test participants		Final sample	
	n	%	n	%	n	%
Generation						
Baby Boomer (Born 1946-1964)	4	12	4	11	4	13
Generation X(Born 1965-1980)	12	35	11	31	9	30
Millennials (Generation Y) (Born 1981-1996)	18	53	19	54	17	57
Generation Z (Born 1997 or later)	0	0	1	3	0	0
Length of management experience						
15 years or more	12	35	11	31	10	33
More than 10 years and less than 15 years	12	35	13	37	12	40
More than 5 years and less than 10 years	5	15	4	11	4	13
Less than 5 years	5	15	7	20	4	13
Experience supervising more than one generation simultaneously						
Yes	30	88	30	86	27	90
No	4	12	5	14	3	10
Number of generations currently supervised						
Four	3	9	3	9	3	10
Three	6	18	7	20	6	20
Two	13	38	13	37	12	40
One	9	26	9	26	7	23
Zero	2	6	2	6	1	3
Which generations do you currently supervise			0			
Baby Boomer	10	29	11	31	10	33
Generation X	16	47	17	49	15	50
Generation Y (Millennials)	31	91	30	86	28	93
Generation Z	9	26	11	31	9	30
Not currently supervising	2	6	2	6	1	3
Workplace			0			
Pittsburgh campus-Admissions and Financial Aid	31	91	32	91	27	90
Regional campus- Admissions and Fincancial Aid	3	9	3	9	3	10

Note. N=30. To be included in the final study population participants needed to be part of both the pre and post-test groups, to have participated in the entire intervention, and to have been in a supervisory role at the beginning of the intervention.

3.5 Training Implementation

Following the overview proposal and approval of my committee, the intervention was applied according to the process of improvement science. IRB approval was sought, and the study was approved. The training intervention served as a small test of change or "Do" within a PDSA cycle since, at the time of this research, our office did not provide any internal supervisory training to managers nor was any training provided specifically on managing multigenerational teams.

All potential participants were invited to the initial training, sent the pre-test and assigned a Qualtrics unique identifier. This allowed responses to remain anonymous for those who chose not to provide their name and email. Consent to participate was provided by completing the pre-test. I had initially planned to only invite to training those individuals who completed the pre-test, but given population challenges, thought it best to invite all those who were eligible for the best odds of achieving the required power threshold. Survey responses were collected for two weeks from the date of the first recruitment email, and the first training module was offered immediately thereafter. Trainings occurred on two consecutive weeks followed by a prescribed one-week period for completing both the post-test and the short answer survey. The short answer survey was articulated as being optional during the training and highly encouraged and critical, in automated follow up communications.

3.6 Methods

3.6.1 Research Questions

Through the course of my intervention, I sought answers to the following three questions:

1. How well equipped to supervise a multigenerational staff do managers feel following training?
2. How much does training improve managers' performance on an in-depth knowledge assessment of generations in the workforce?
3. Which component, if any, of the multigenerational management training do managers feel has the greatest impact on their ability to manage an age-diverse staff?

3.6.2 Research Design

To assess the impact of the training intervention, this study used a quantitative approach with a causal-comparative, pretest-posttest design. The pre-post testing was utilized to evaluate the same group of recruited managers prior to and following the implementation of a training intervention. Pre-testing, and self-assessment of knowledge are effective ways to create commitment to learning (Dirksen, 2016). Both pre- and post-testing were administered via Qualtrics. All questions were multiple choice. Competency questions were on a 5-point Likert scale. This approach was selected since it is utilized by Gallup, an industry leader on the topic of management, in their survey research (Clifton & Harter, 2019). To avoid limitations of recall and to prevent participants from studying information specific to questions they got wrong, even those participants who chose not to remain anonymous in order to receive their their pre- and post-assessment results, were not given their scores until after the intervention was considered complete (no longer accepting responses).

Unlike an experimental design, which requires a control group and random assignment of participants, my intervention was deployed with the entire population of managers who agreed to participate. Managers' assessment results and post-intervention survey feedback were the dependent variables, and training served as the independent variable. Causal- comparative designs are favorable as they allow for an examination of cause and effect without the need to manipulate variables (Henning & Roberts, 2016). However, this design also comes with the limitation that there are other differences with a bearing on the post-test assessment outside of the impact of the independent variable, which is, a limitation to definitively claiming causation (Henning & Roberts, 2016). Further, this study design (one group, pre-test/post-test) has several sources of potential invalidity internally: history, maturation, pre-testing, instrumentation, interaction of sample

selection, and other factors, and externally: the varied interactions with participants and the intervention itself (Henning & Roberts, 2016). While these limitations remained, the goal of the short answer survey following the intervention and assessments was to help provide greater evidence of causation and efficacy related to the direct impact of the training intervention.

Quantitative measurement was appropriate in my specific context and remains the most popular approach for research involving human resources given perceived greater capacity to establish reliability and validity (Samul, 2017). This approach was chosen despite qualitative measurement growing increasingly popular as it becomes more challenging to measure human behavior and as researchers are seeking methods with less potential for bias (a frequently noted limitation of quantitative studies as they allow for exclusion and manipulation of data) (Samul, 2017).

Despite these limitations, in selecting a quantitative approach my core considerations included: (1) my positionality as an individual doing research within my own place of practice that measures an element of performance; (2) the need for participants to have the capacity to remain anonymous since, as described previously, the study could place undue pressure to participate and/or perform on those I supervise, or even on my colleagues, peers, or supervisors; (3) the short duration of my study and its reliance, as such, on reported increases in competency as a measure of efficacy, which would require participants to honestly report any perceived personal weaknesses related to multigenerational management, which is, in many cases, more likely to occur with the guarantee of anonymity; and (4) the small potential sample size limiting the capacity to introduce a control group and still maintain any semblance of significance in results for a quantitative study.

3.6.3 Assessment Instruments

For managers, the assessment for both the pre-test and post-test consisted of 28 questions and includes five sections which included: five questions concerning demographics, five questions concerning perceived personal competence at point of assessment, and six questions each (18 total) related to content to be grasped through each of the three training modules: remembering, understanding, and application. The assessment was designed to assess whether higher order learning has occurred in alignment with Bloom's taxonomy since none could be answered based on remembering a singular fact about a generation. The questions were also reflective of what would be taught within the training modules, and each generation was intended to equally represent. (It could be argued that Baby Boomers were slightly over-represented because they were the correct answer to one more question than the other generations, which was an unintentional design error). The topics discussed related directly to the workplace but were not exhaustive. The assessment also included an open-ended option to provide name and email for those individuals who were interested in knowing their own improvement over time as participants would otherwise have been tied solely to their Qualtrics random ID. Participants were provided with an optional, post-intervention survey assessment consisting of ten questions that were a combination of multiple choice and open-ended response questions.

3.7 Measures

The ultimate impact of the intervention was measured via paired samples t-tests (assessments and intervention) and thematic analysis (post-survey). Five t-test assessments were

conducted: one for competence, one for each of the three functional knowledge areas: remembering, understanding, applying, and one for overall performance on the knowledge assessment. As described by Henning and Roberts (2016), to be considered statistically significant my *t* value (the difference in means between the two assessment groups) needed to have a *p* value of less than .05. In addition to the t-tests, I conducted an effect size analysis using Cohen's *d*, to assess the practical significance of my results. The use of Cohens *d* involved comparing the mean performance of the two assessment groups before and after the intervention and dividing by the pooled standard deviation to measure effect size. To be considered significant, the effect size must have been greater than or equal to .30, where .30 indicates a small effect size, .50 indicates a medium effect size, and .80 indicates a large effect size. Finally, I utilized six multiple choice and four open-ended survey questions for additional information on the efficacy of the assessment. Open-ended responses were coded utilizing thematic analysis, and quantitative statistics were summarized in aggregate in assessing areas for improvement and which modules were most and least effective. The quantitative components of the optional post-survey did not undergo any specific statistical analysis as the number of participants did not meet a power threshold for significance.

3.7.1 Data Collection and Analysis

Survey results were formally tabulated through Qualtrics and Microsoft Excel Data Analytics. Data were exported from Qualtrics for pre- and post-test analysis of descriptive statistics, analyzed by a series of paired samples t-tests. A Cohens *d* formula corrected for small sample sizes. Pre-post analysis of matched pairs t-tests was utilized to measure the impact of the training intervention on managers' performance before and after participation in the training

intervention. Competency was scored according to the 5-point Likert scale providing for a maximum score of 25 based on five questions. The segment of the assessment focused on self-perceived competency in managing multigenerational staff was analyzed in line with methodology recommended by Boone and Boone (2012) for Likert-scale data. Five questions were utilized to assign an overall competency score. As described by Boone and Boone (2012), a Likert scale consists of at least four Likert-type items that are combined into a single composite score or variable. Consistent with standard measurement for scoring instruments, correct responses on the knowledge assessment were given a value of 1 and incorrect responses were given the null value of zero. Participants were able to score six points per module and up to 18 points. The effect size of the intervention was measured utilizing the formula for Cohen's *d*. A smaller sample size (n=30) could lead these results to be slightly inflated. Thus, in order to prevent drawing incorrect conclusions, I applied a correction factor for small sample sizes (n<50) (Glen, 2021).

The data were also disaggregated by the categorical variables of generation, length of management experience, and number of generations supervised as potential insight for future research. Once disaggregated, the population size was not large enough to draw any definitive conclusions but did provide insight that could guide later practice. To analyze the optional post-test survey, I conducted manual thematic analysis of the open-ended responses and summarized the quantitative responses.

3.8 Limitations

It is important to assess the various limitations in my research which include, and may not be limited to, small sample size, ease of maintaining confidentiality, the Dunning-Kruger (1999)

effect, the ability to accurately identify causation, the debated foundation for generational research, the pivots to design mandated by time, technological issues, and the Covid-19 pandemic.

In general, my research was limited by a small sample size for drawing definitive conclusions within quantitative research. To establish a trustworthy p-value, which is needed for an accurate determination of effect size, I needed to have 30 participants, a number I hit exactly despite having as many as 37 staff participate in the formal training. Potentially even more critical, only 16 of the 30 participants were represented in the final survey, which was only slightly over half of the participants. Therefore, the results could have been altered substantially with a participation rate more like the overall population. Since a research question was tied to the results of this survey, I should have made it a mandatory component of the training.

Additionally, while a quantitative approach was selected for the purpose of maintaining anonymity, certain information was required to assess results. While unlikely, demographic information could have rendered some participants identifiable who were part of small groups within our office. Participants who were concerned about anonymity may have recognized the risks and decided not to participate.

Also related to anonymity, it was possible that I would encounter the impact of the Dunning-Kruger effect in managers' personal evaluations of their competencies. This is a cognitive bias that often leads to an over-estimation of one's skills or abilities and even an inability to recognize areas of incompetence (Kruger & Dunning, 1999). If initial evaluations were over-inflated, this would lead the impact of the research to be underestimated.

The study is also subject to the general limitations of a pre-post design including the challenge of tracking causation. It will be difficult to determine if knowledge changed because of the intervention or because awareness of their personal limitations encouraged more independent

research or other forms of improving staff management between the pre- and post-test (Henning & Roberts, 2016). While the inspiration for independent research would be positive for my place of practice, it could inhibit the ability to gauge what learning was the result of the training intervention versus independent research. Finally, in general limitations for a quantitative approach include, both, respondents are constrained to a limited number of answers, and it can be difficult to ascertain meaning behind responses (Trochim, 2020).

Next, while the conceptual framework for my research was based in Mannheim's generational theory, the role of generation in management and workplace satisfaction is still debated. At the end of the day, the best approach is to treat every employee as an individual. As admonished by Al-Asfour and Lettau (2014), managers should remain cognizant of any risks of "favoritism or discrimination of employees based on their generational cohort" (p. 66). I attempted to ensure that prescriptions from my training did not lead to personal bias toward staff or toward developed biases among our managers by regularly mentioning and noting on materials and handouts that, accurate or not, generational identities are still generalizations.

Finally, the COVID-19 pandemic created some immediate limitations. First, it led to the implementation of the Staff Early Retirement Program, which altered the demographic composition of our office and led to the departure of five Baby Boomers including one supervisor. Second, in addition to dealing with the stress of the pandemic, managers had to accommodate for the voluntary departure of five additional staff members including an additional supervisor. The loss of ten staff during the span of my study (August to February) was double the turnover the year prior during that same time span. These changes made getting my required population unexpectedly more complicated and put my participation likelihood at risk. This ultimately required me to expand my scope to a previously unstudied population, our regional campus

leadership. Second, COVID-19 and remote work required the training to be conducted entirely virtually. While virtual delivery was already the plan at the point of my proposal, this would not have been my ideal approach to such highly interactive work. This led me to reduce my training time from a planned four to two hours to accommodate. This decision may have had a negative impact on the results. Most critically, the technological issues would also have been unlikely to occur. Issues with technology led to a need to compress the second training, which was the most important for long-term impact on the organization. These limitations may have been reflected in the results.

4.0 Results

The research presented in this Dissertation in Practice was designed to assess the impact of a training intervention on assisting managers in successfully supervising a multigenerational workforce. This chapter provides the results of the executed intervention.

4.1 Assessment of Self Perceived Competency

A measure of self-perception of competence was used as a means of predicting likely future actions or adaptations of managers following participation in the intervention. While this information remains somewhat limited in its capacity for drawing definitive conclusions, it was an appropriate measure given the short duration of the study.

The data suggest that, following the training intervention, managers felt their multigenerational competence grew overall and in each of the five areas measured by the Likert scale questions on the pre- and post-assessment. As seen in Table 8, participants reported experiencing the greatest growth in their understanding of the generations and in how to use their strengths with the mean score improving from 3.33 to 4.17 out of 5.0 and 3.27 to 4.10 out of 5.0, respectfully. Participants also experienced some growth in their ability to manage multiple generations of staff simultaneously and in their capacity to diffuse conflict by improving by just under half a point. Finally, growth occurred but was not substantial related to improved ability to alter management styles toward staff preferences in general. Any improvement over half a point was considered as substantial for the individual questions.

97

Table 8. Pre and Post-Assessment of Self-Perceived Competency by Mean Difference

Question content	Mean score (pre-assessment)	Mean score (post-assessment)	Mean difference
Full assessment score	18.03	20.77	2.74
I understand the workplace preferences of each of the generations represented in my workplace	3.33	4.17	0.84
I know how to utilize the unique strengths of different generations to create opportunities within my team	3.27	4.10	0.83
I feel confident in my ability to manage multiple generations of staff, simultaneously	3.77	4.23	0.46
I am able to successfully diffuse conflict between staff of different generations	3.63	4.07	0.44
I know how to alter my management style toward the preferences of my staff	4.03	4.20	0.17

Note. All questions were on a 5-pt Likert scale where 5 represented "definitely yes" and 1 respresented "definitely not".

In conducting additional statistical analysis, there was a significant difference between the overall sum scores before the intervention (M=18.03, SD=2.83) and after the intervention (M=20.47, SD=2.36); t (29) =4.55, p=.000. The large t-value suggests the results were not purely by chance and a p value of <.05 indicates the results were statistically significant which means the intervention had a measurable impact on participant's results. The t-test results were evaluated further via the calculation of a Cohen's *d* coefficient (.88). This coefficient is indicative of a large effect size. The initial population pre-intervention was a full .88 standard deviations away from the post-intervention group. A large effect size (anything greater than .80) suggests the differences between the two assessment performances were "obvious" (Goulet-Pelletier & Cousineau, 2018, p. 243). Overall, the data suggest we can be confident the intervention made an impact on managers' perception of their competence.

Box and whisker plotting of the data also corroborates the observability of the effects. Figure 10 indicates that almost the entire population of participants rated their competency higher on the post-test than the pre-test. The majority of scores also fell at or above the mean, and both the mean score and the median exceeded the majority of all scores in the pre-test, which was

indicative of significant improvement for most of the sample. Further, the reduced size of the box at post-test indicates the standard deviation between the scores decreased, which indicates there were very few outliers whose substantial improvement could be skewing the results of the data. In either group, there was only one observable outlier, someone with a score that was significantly different from the larger group. The single outlier further confirms the impact of the intervention on the self -perceived competency of the entire group and not just a select few participants.
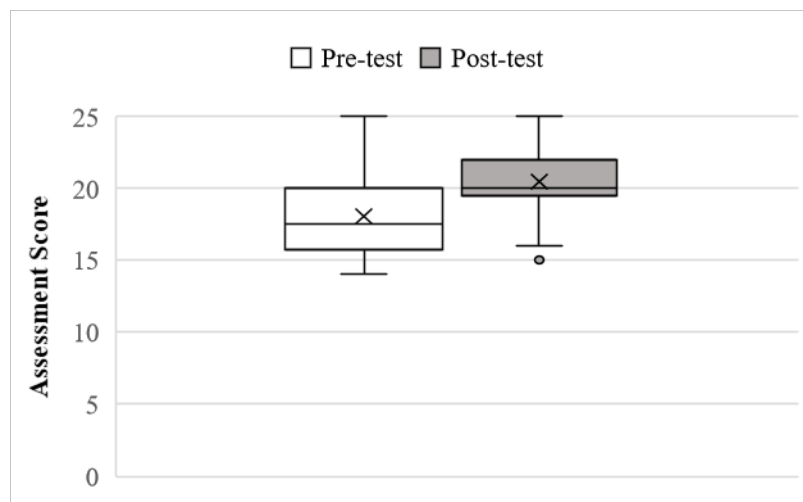
Figure 10. Box and Whisker Plot of Self-Percieved Competency Scores at Pre-test and Post-test

4.2 Assessment of Knowledge (Remembering, Understanding, and Applying)

The knowledge components of the formal assessment were intended to gauge improvement in each of three specific areas of remembering, understanding, and applying. Descriptive statistics were used to analyze these data, and paired sample t-tests were conducted to compare managers' performance on the pre-test and post-test assessment following the training intervention. The formal inquiry question tied to this component of the assessment was: How much does training

improve managers' performance on an in-depth knowledge assessment of generations in the workforce?

4.2.1 Overall Performance

The results of the assessment data on remembering, understanding, and applying were mixed. Broken down by individual questions (see Table 9), scores improved for the average participant on 72% of the questions including every question in the remembering component of the assessment. Broken down by the three central components, remembering was the only segment where improvement was consistent across questions.

Within remembering, scores improved for all six questions. They improved most on the question related to Gen X. The improvement in scores was substantial with 27% responding correctly on the pre-test and 70% responding correctly on the post-test. Scores also improved fairly substantially on the question relating to generational similarities moving from 50% to 80% responding correctly.

Within understanding, three questions had notable changes. The scores related to Gen X and to Baby Boomers. These improved a fair amount moving from 40% correct at pre-test to 57% correct at post-test and 47% correct to 63% correct, respectively. While the other scores had slight improvements or declines, the only other notable result was a 10% decline in the question referencing Millennials with scores going from 60% correct to 50% correct.

Finally, within applying, scores improved substantially on the questions referencing the Create Once Publish Everywhere (COPE) model (improving from 20% correct to 53% correct), Shaw's *Five Steps for Leading Through Generational Differences* (improving from 43% correct to 67% correct), and once again, as was seen in remembering, on the question referencing

generational similarities (improving from 40% correct to 63% correct). There was also a notable decline in correct responses related to the question on the general workplace from 90% correct at pre-test to 80% correct at post-test. Scores also declined on the questions referencing conflict and differences in workplace preferences. While these declines were not by a noteworthy amount, it is worth recognizing that three of the six questions in this segment saw no improvement.

Table 9. Accuracy of Assessment Responses Before and After Intervention

Assessment component	Abbreviated content	Correct responses at pre-test (%)	Correct responses at post-test (%)	Change following intervention (%)
Remembering	Which describes Generation X in the workplace	27%	70%	43%
Remembering	What three things do all generations seem to desire at work	50%	80%	30%
Remembering	Which describes Baby Boomers in the workplace	60%	83%	23%
Remembering	Which describes Generation Z in the workplace	50%	67%	17%
Remembering	Which describes Millennials in the workplace	63%	73%	10%
Remembering	What has had greatest impact in creating generational differences	57%	67%	10%
Understanding	Which major event did not play role in Gen X view of workplace	40%	57%	17%
Understanding	Which two events played large roles in Baby Boomer workplace characteristics	47%	63%	16%
Understanding	Members of the same generational cohort share the same…	83%	90%	7%
Understanding	Which statement about Gen Z (personal preferences and corresponding workplace	20%	23%	3%
Understanding	Based on events during their upbringing, which generation is likely to emphasize	63%	60%	-3%
Understanding	What most influenced Millennials opposition to traditional career ladders	60%	50%	-10%
Applying	Which of the following is not something the tactic "Create Once Publish Everywhere"	20%	53%	33%
Applying	Which of the following is NOT one of Shaw's "Five Steps for Leading Through	43%	67%	24%
Applying	Which change could appeal to the most generations simultaneously	40%	63%	23%
Applying	Which is the primary source of generational conflict	43%	40%	-3%
Applying	Which generation is hard to retain without opportunities for promotion and/or increased	43%	40%	-3%
Applying	Workplaces must adapt as what traditional feature is challenged	90%	80%	-10%

In sum, scores did improve overall although performance across questions varied widely. The overall improvement was also largely led by the substantial improvements in the remembering and applying components of the assessment as indicated more formally through descriptive statistics. As depicted in Table 10, the overall assessment performance at pre-test (M=8.800, SD=2.055) verses post-test (M=11.267, SD=2.932) showed statistically significant improvement t(29)=3.84, p=0.000), including a noticeable mean difference and a large effect size of 0.911. Data that allow for drawing the conclusion the training did, in fact, impact participants' performance on the formal assessment of learning.

Table 10. Analysis of Impact of Training Intervention

Assessment component	Pre-test results		Post-test results		t (29)	p	Cohen's d with correction factor
	M	SD	M	SD			
Self-Perceived competency	18.033	2.834	20.467	2.363	4.545	0.000	0.877
Remembering	3.067	2.499	4.367	1.847	3.309	0.001	0.556
Understanding	3.133	1.847	3.467	1.147	1.354	0.093	0.233
Applying	2.600	0.75	3.433	0.924	2.977	0.003	0.600
Overall assessment score	8.800	2.091	11.267	2.932	3.837	0.000	0.911

*significance, p<.05, Cohen's d >.30

Note. The overall assessment score represents the sum of the scores for remembering, understanding and applying.

Box and whisker plots were again created to analyze each of the assessment components including overall scores, remembering scores, understanding scores, and applying scores. As depicted in Figure 11, there was substantial overlap in overall pre- and post-test performance despite the fact that the mean post-test score did exceed almost the entirety of pre-test scores. This means that, while the average participant performed better on the post-test than the pre-test, the results did not improve for the entire population. The mean score for the post-test also exceeded the majority of all scores for the pre-test. However, more individuals performed below the mean score in the post-test than did in the pre-test. This appears to indicate that those who improved substantially on the post-test may be skewing the numerical results that show substantial

improvement in overall scores. Finally, the standard deviation and whisker lengths expanded for the post-test, which represents a greater variation in scores overall including some decline.
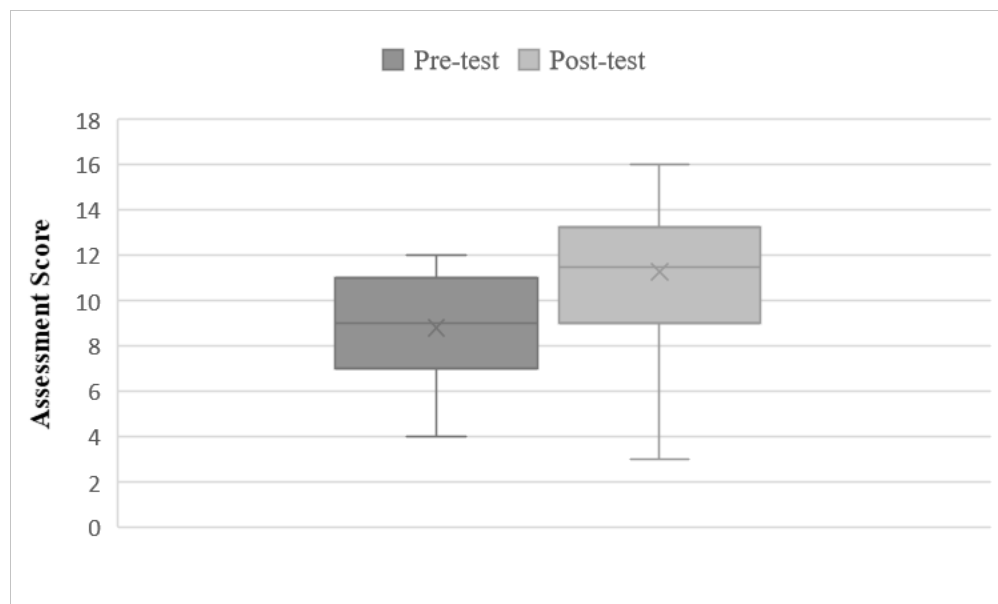
Figure 11.   Box and Whisker Plot of Overall Assessment Scores at Pre-test and Post-test

4.2.2 Performance on Remembering

As referenced in Table 10, in the portion of the assessment dedicated to remembering, there were statistically significant differences in performance between the pre-test (M=3.067, SD=1.412) and the post-test (M=4.367, SD=1.516). Results were also indicative of a statistically significant impact and a medium effect size t(29)=3.309, p=0.001, Cohen's *d*=0.556. This Cohen's *d* value suggests the effects were present but "subtle" (Goulet-Pelletier & Cousineau, 2018, p. 243). Further, more than half of participants performed better in the post-test than the aggregate in the pre-test as indicated by box and whisker plotting in Figure 12. While there was still a good deal of overlap, the mean score at the post-test exceeded the majority of scores at the pre-test, and several individuals had perfect scores, clearly indicating improvement. It should not be ignored,

however, that a greater portion of participants scored below than above the mean score. There was also a much larger standard deviation between scores at the post-test than at the pre-test, which means the impact was more varied on this component. It still seems reasonable to conclude the intervention helped produce a substantial change in performance on this segment given the number of scores exceeding those at the pre-test.
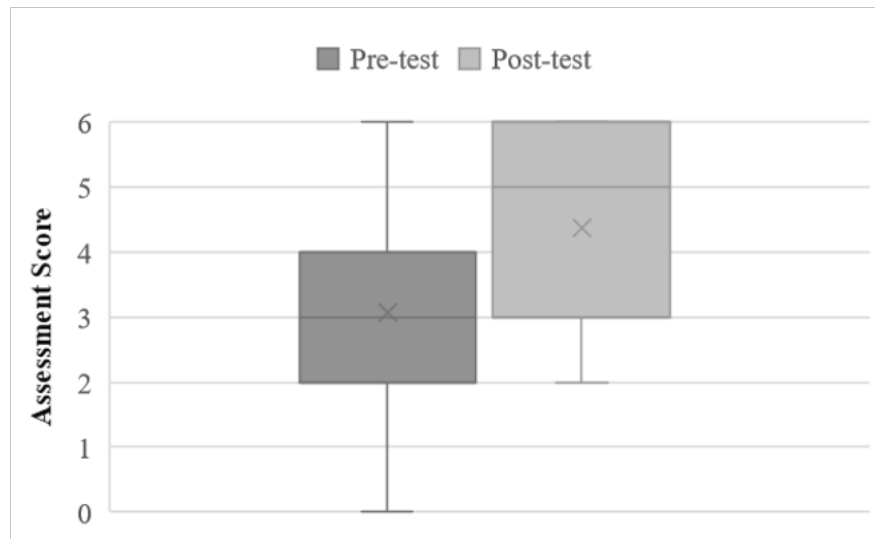
Figure 12.   Box and Whisker Plot of Remembering Scores at Pre-test and Post-test

4.2.3 Performance on Understanding

As previously articulated and shown in Table 10, performance improvement on the understanding component was minimal from pre-test (M=3.133, SD=1.516) to post-test (M=3.467, SD=1.147). Improvement occurred, but the change was not statistically significant (t(29)=1.355, p=0.092), nor was there a substantial effect size Cohen's d =0.233. In assessing the data via a box and whisker diagram as shown in Figure 13, there was also significant overlap in performance from pre-test to post-test along with no substantial changes. There were, however, more similar higher scores, overall and less standard deviation in scores. The score distribution on both tests

was fairly normal with similar numbers scoring above and below the mean, which means neither a substantial amount of especially high scores nor especially low scores were affecting the results. The pre-test plot indicates there was much room for improvement since, although there were no outliers, there were individuals scoring as low as 0 on the pre-assessment. The post-test plot positively indicated less deviation in scores and better performance overall.
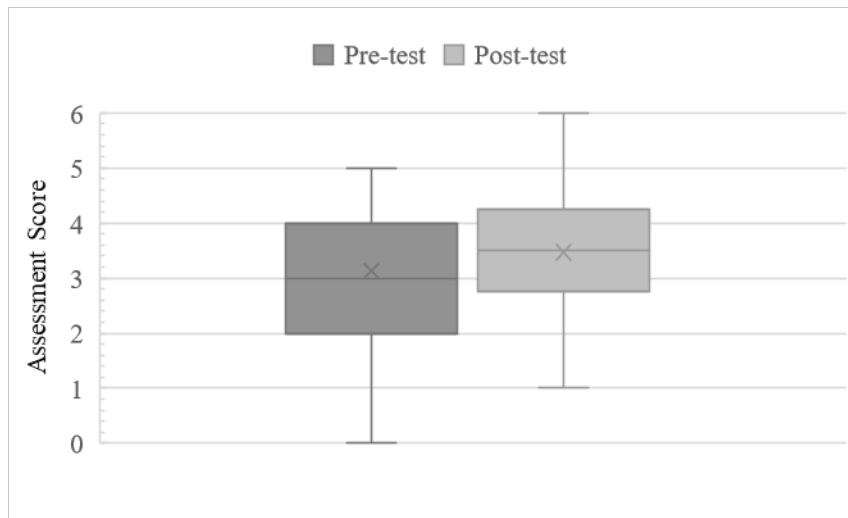
Figure 13. Box and Whisker Plot of Understanding Scores at Pre- and Post-test

4.2.4 Performance on Applying

Finally, in the portion of the assessment dedicated to applying, there were statistically significant differences in performance on the portion between the pre-test (M=2.600, SD=0.757) and the post-test (M=3.433, SD=1.453); t(29)=2.977, p=0.003) (see Table 10). There was also a medium effect size with a Cohen's *d* of 0.600 again indicating credit for improvement could be reasonably attributed to the intervention. The results in this segment relatively align with the performance on the individual questions. Looking at a box and whisker plot of the data, the majority still performed better than they did in the pre-test assessment; in fact, the mean score is

well above the majority of the pre-test scores. The data are somewhat skewed with a greater portion of participants performing above the mean, than below. Applying was the portion of the assessment where there was the greatest variation in scores. Despite there being no statistical outliers, a large box featured in Figure 14 indicates a wide variety within the scores around the mean. This indicates that although most participants did improve substantially, the scores around applying varied widely. With some performances even declining, the impact appears highly individualized and less on the aggregate than in the other components.
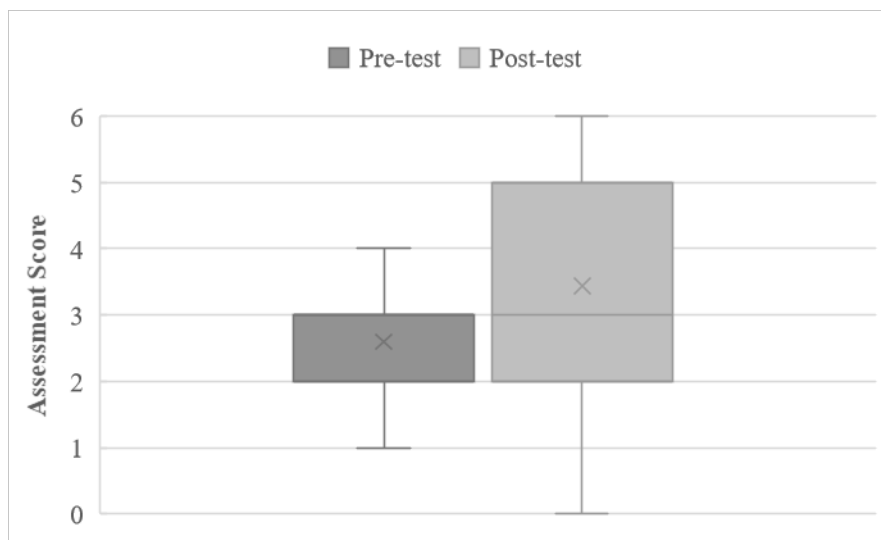
Figure 14. Box and Whisker Plot of Applying Scores at Pre-test and Post-test

4.3 Assessment of Intervention Efficacy: Post-Intervention Survey

Finally, both descriptive statistics and thematic analysis were utilized to evaluate the post-assessment survey to gauge the efficacy of the intervention and answer the research question: Which component, if any, of the multigenerational management training did managers feel had the greatest impact on their ability to manage an age-diverse staff?

Tables 11 and 12 provide the results of the post-assessment survey that was used to evaluate the efficacy of each of the training components in contributing to overall results. When drawing conclusions, it is important to note that only 16 of 30 participants completed this portion of the assessment. Participants were asked about each core segment of the training as well as the individual components. The general conclusion is that no one factor appeared to be the sole contributor to participants' perception of the training's efficacy. However, as depicted in Table 11, Understanding was the only component where 100% of participants responded "definitely yes" or "probably yes" to whether the activity would help them to better manage a multigenerational staff compared to 75% and 69% respectively for the remembering and applying components. Feedback themes of the understanding component of the training (breakout rooms discussing generational conflict in the workplace from varied perspectives) included: (1) the providing of helpful context to generational difference and (2) the development of understanding. Themes of the remembering component (a generations true or false game) included: (1) it assisted in providing insight related to generational conflict and (2) it provided an overall understanding of the differences between generations. Finally, in applying (generational case study/role play scenarios) the theme was that it helped or could have helped with empathy and broadening perspective.

Table 11. Integrated Results of Quantitative and Qualitative Training Feedback

Integrated Results Matrix for Participant's Percieved Impact of Managerial Training (N=16)

Training component	Quantitative result (response to whether the activity would help them better manage a multigenerational staff)	Themes	Example quote(s):
Generational true and false (Remembering)	44% of respondents (n=7) responded "definitely yes"; 31% (n=5) responded "probably yes".	Helped in approaches to addressing conflict	Respondent 1: "This training helped me to identify current conflicts that are likely due to generational difference. Without this training, the conflict may have gone on unresolved." Respondent 5: "I went in feeling very confident in my ability to relate and communicate across multipe generations but learned that listening does not mean only to others but to yourself regarding how you say things, not just what you say."
		Helped in understanding the differences between generations.	Respondent 1: "This training helped me to identify current conflicts that are likely due to generational difference." Respondent 4: "It has helped to understand historical context of each generation and why they may have different point of views on how/why work should get done" Respondent 8: "provides an opportunity to discuss differences and preferences of individual staff"
Review of generational characteristics and their social and historical context/breakout rooms (Understanding)	56% of respondents (n=9) responded "definitely yes"; 44% (n=7) responded "probably yes".	Gave helpful context to generational difference.	Respondent 2: "It was helpful to hear in the breakout rooms, how some agreed or disagreed with the characteristics of their cohort" Respondent 6: "Understanding more of the social context of what effected someone in their generation. I do not think that I had a true appreciatin of that until this exercise."
		Helped in developing understanding.	Respondent 5: "Understanding groups may be skeptical or all in is important. " Respondent 7: "I think the more information I have about the generational differences, the better I can "listen" to things that are unsaid by my staff and adapt my supervising techniques accordingly."
Generational role play scenarios (Applying)	25% of the respondents (n=4) responded "definitely yes"; 44% (n=7) responded "probably yes".	Helped/or could have helped with empathy and broadening perspective.	Respondent 2: "Previously, I had only paid attention to the generations I'd supervised - two of the four. This helps me learn about the other two that aren't represented but may be, one day" Respondent 3: "Talking through situations with others is most helpful because it provides insight into your own thought process and how you can strengthen or more importantly see the holes you are not seeing." Respondent 4: "The idea is nice to empathize with another generation, but we did not get a chance to officially do this."

As depicted in Table 12, data were also broken down by the individual elements of the training design. Group work and the process of learning new information were considered the most effective components of the training as indicated on 56% percent of survey responses. Seen in quotes from the post-intervention survey (Appendix H), the opportunity to have discussion and debate within multigenerational teams was clearly beneficial. It would also appear that having reference guides was considered a positive contribution to a substantial portion of participants as indicated in 38% of survey responses.

Table 12.   Most Effective Training Components Per Post-Intervention Survey

Most Effective Training Components (N=16)

Training component	Example Quote	Frequency, n (%)
The group work	"It was helpful to hear in the breakout rooms, how some agreed or disagreed with the characteristics of their cohort." "Talking through situations with others is most helpful because it provides insight into your own thought process and how you can strengthen or more importantly see the holes you are not seeing." "Huge benefit. I learned a lot about the differences but also that there are some similarities."	9 (56%)
Learning new information	"Before the training, I didn't normally consider these characteristics, although I was generally aware of some of them. I feel well-versed now in this information."	9 (56%)
The reference guide	"Handouts - clear and easy to read and understand."	6 (38%)
The facilitation (style, delivery)	"The content was excellent & Lauren is an exceptional presenter. It is very obvious that she knows the content inside and out." "Nicely presented Lauren! "	5 (31%)
The frequency (twice)	N/A	5(31%)
The PowerPoint presentations	N/A	4 (25%)
The length of time (1 hour each, 2 hours total)	N/A	2 (13%)

Note. Participants could give multiple answers, and were given the option to "select all that apply". Five respondents gave a single answer (The group work, n=3, learning new information, n=1, and the reference guide, n=1).

The least effective training component, as described in both the pilot study and the official intervention, was the length of time as indicated by 64% of responses (see Table 13). Similarly, the frequency, two trainings, was considered to be too few (36% of responses).

Table 13.   Least Effective Training Components per Post-Intervention Survey

Least Effective Training Components (N=11)

Training component	Example Quote	Frequency, n (%)
The length of time (1 hour each, 2 hours total)	"I wish there was more time for collaboration, report outs, etc." "I think it would have been beneficial to extend each training by 30 minutes to allow for more discussion." "it was a lot of information shared in a relatively short amount of time" "more time and more examples, less power point" "Seemed too short. A lot of information to retain in a short time. "	7 (64%)
The frequency (twice)	"To help continue the conversation and effectiveness, it would be great to regularly revisit these trainings as a group every 6 months." "Lots of information to digest and interpret. More sessions would be appropriate." "I would enjoy parsing out the training to weekly/biweekly over a couple of months and then occasionally meet to process experiences."	4 (36%)
The group work	"The idea is nice to empathize with another generation, but we did not get a chance to officially do this."	2 (18%)

Note. Participants could give multiple answers, and were given the option to "select all that apply". Of the 16 individuals who completed the survey, five responded "none, I felt every element of the training was effective" when asked for the least effective component, so there are fewer responses for the least effective component than the most effective component.

4.4 Additional Analysis of Results Sorted by Categorical Variables

Finally, although the individual samples were not large enough for formal statistical analysis, I reviewed the data broken down by the assessments' categorical variables. This provided additional background on the trainings' efficacy and could inform future research and training iterations. As it relates to the self-competency component (see Table 14), noteworthy results were the substantial improvement for Millennials and those with less than 10 years supervisory experience, and the slight decline in scores for Baby Boomers and those supervising three or more generations (These populations are not mutually exclusive.). Millennials' scores increased a full three points between pre- and post-test from an average of 17.76 to 20.76. Those with less than 10 years of supervisory experience (a similar but not identical population) saw a score increase from 17.65 to 20.65. These scores indicate these populations perceived themselves as much more

111

competent multigenerational managers following the intervention. Baby Boomers and those supervising three or more generations saw scores decline from 19.00 to 18.75. While not a significant amount, it is interesting to note that the population that was most likely to be the most experienced managers felt less competent after the training. It should be noted that those with 10 or more years of experience did see scores improve. However, their improvement still lagged behind that of less experienced staff, and their post-test score remained slightly lower than that population (20.56 for 10 or more years versus 20.65 for less than 10).

Table 14. Self-Competency Scores by Categorical Variable

Category			
	Competency Score		
	Pre-test	Post-test	Difference
Three or more generations supervised (n=9)	19.00	18.75	-0.25
Two or fewer generations supervised (n=21)	19.22	21.44	2.22
10 or more years of supervisory experience (n=13)	18.69	20.56	1.88
Less than 10 years of supervisory experience (n=17)	17.65	20.65	3.00
Baby Boomer (n=4)	19.00	18.75	-0.25
Generation X (n=9)	18.11	20.67	2.56
Generation Y (Millennial) (n=17)	17.76	20.76	3.00

Breaking down the overall scores for the knowledge assessment, as seen in Table 15, the categorical variables were consistent with the overall results, and participants did improve, on average, across categorical variables. Of note, however, is that those with less experience, as well as Millennials, overall, performed better in almost every area of the formal knowledge assessment in both the pre-test and the post-test. Millennials had an overall average post-test score of 11.47 out of 18, the highest score of any generation followed by those with less than 10 years of supervisory experience with scores of 11.41. However, it is interesting to note that the most improvement occurred for Baby Boomers and for those supervising three or more generations with scores improving 2.50 points on average from 8.00 at pre-test to 10.50 at post-test. The only outlier

in this area was that those who supervised three or more generations performed slightly better on the post-test (10.50) than those only supervising two generations (10.33).

Table 15. Overall Assessment Score by Categorical Variable

	Overall Score		
Category	Pre-test	Post-test	Difference
Baby Boomer (n=4)	8.00	10.50	2.50
Three or more generations supervised (n=9)	8.00	10.50	2.50
Generation Y (Millennial) (n=17)	9.00	11.47	2.47
Generation X (n=9)	8.78	11.22	2.44
Less than 10 years of supervisory experience (n=17)	9.12	11.41	2.29
Ten or more years of supervisory experience (n=13)	8.69	10.69	2.00
Two or fewer generations supervised (n=21)	8.67	10.33	1.67

In the area of remembering (see Table 16), similar to the overall scores, those with less experience and Millennials actually performed better in all of the pre-test components and most of the post-test components. The same outlier exists here, as with self-competency; those who supervised more generations of staff performed better on the post-test than those supervising two or fewer. However, what is interesting is that Baby Boomers, those with 10 or more years of supervisory experience, and those with three or more generations supervised saw the most substantial improvement in scores from pre- to post-test improving by 1.5 points on average. Those with less experience improved the least but generally had the highest post-test scores. The exception to this result was with two or fewer generations supervised whose scores improved the least (0.78) and who also had the lowest post-test scores (3.44 out of 6.0).

Table 16. Remembering Score by Categorical Variable

| | Remembering Score | | |
	Pre-test	Post-test	Difference
Category			
Baby Boomer (n=4)	2.25	3.75	1.50
Ten or more years of supervisory experience (n=13)	2.69	4.19	1.50
Three or more generations supervised (n=9)	2.25	3.75	1.50
Generation Y (Millennial) (n=17)	3.24	4.59	1.35
Generation X (n=9)	3.11	4.22	1.11
Less than 10 years of supervisory experience (n=17)	3.47	4.41	0.94
Two or fewer generations supervised (n=21)	2.67	3.44	0.78

The area of understanding did not provide many new conclusions as there were few significant score changes in any area. Shown in Table 17, Gen X had the largest growth in this category as did those with less than 10 years of supervisory experience and those supervising two or fewer generations. These last two data points could be predicted. What is interesting, however, is that Baby Boomers and those with more generations supervised and more years of experience either did not improve or got worse in this area even though they had the highest scores at both pre-test and post-test. However, it may be interesting to note that, generally speaking, this was the one area where those who supervised more generations and had more experience performed better than or almost identical to those with less experience. It is also interesting to see how much better those who supervised more generations and the baby boomers performed on this component of the assessment.

Table 17. Understanding Score by Categorical Variable

	Understanding Score		
Category	Pre-test	Post-test	Difference
Generation X (n=9)	3.11	3.67	0.56
Less than 10 years of supervisory experience (n=17)	3.00	3.41	0.41
Generation Y (Millennial) (n=17)	3.00	3.29	0.29
Two or fewer generations supervised (n=21)	3.00	3.22	0.22
Baby Boomer (n=4)	3.75	3.75	0.00
Three or more generations supervised (n=9)	3.75	3.75	0.00
10 or more years of supervisory experience (n=13)	3.44	3.38	-0.06

Finally, within applying, as depicted in Table 18, there were three interesting results. One unexpected finding (though it persists throughout this study) was that greatest growth occurred with Baby Boomers and those supervising three or more generations. Both improved by a full point on average. In line with this finding, those with 10 or more years of supervisory experience saw the least improvement but performed similarly on the post-test to Baby Boomers and those supervising more generations. These groups represented the three lowest post-test scores. The final interesting, though also recurring, finding is that the strongest post-test performance came from Millennials, those supervising fewer generations, and those with less than 10 years of supervisory experience with scores of 3.59, 3.67, and 3.59, respectively.

Table 18. Applying Score by Categorical Variable

	Applying Score		
Category	Pre-test	Post-test	Difference
Baby Boomer (n=4)	2.00	3.00	1.00
Three or more generations supervised (n=9)	2.00	3.00	1.00
Less than 10 years of supervisory experience (n=17)	2.65	3.59	0.94
Generation Y (Millennial) (n=17)	2.76	3.59	0.82
Generation X (n=9)	2.56	3.33	0.78
Two or fewer generations supervised (n=21)	3.00	3.67	0.67
10 or more years of supervisory experience (n=13)	2.56	3.13	0.56

5.0 Discussion

This study explored training as an intervention capable of assisting managers in college admissions and financial aid in successfully supervising a multigenerational workforce. The primary purpose of the training was to help managers feel confident in supervising generational diversity including promoting workplace satisfaction, reducing conflict, and recognizing unique generational strengths to create opportunities. The application of improvement science provided an understanding of what has caused the multigenerational workforce to be so complex for managers and began the conversations necessary for improvement to occur. Through a review of the literature, training was identified as an intervention capable of addressing the identified problem of practice. Literature on training, multigenerational management, and the multigenerational workforce was used to develop a training tool and corresponding assessment.

Thirty participants participated in a two-part, three module training, and a quantitative, pre- and post-assessment survey of knowledge and self-perceived management competence. Sixteen participants also evaluated the intervention content with a mixed-methods post-survey. The results of this study and the improvement from pre- to post-assessment confirmed that there is progress to make for managers and that training has the capacity to influence this progress. The discussion in this chapter addresses the efficacy of training as an intervention approach and discusses conclusions made based on the findings. The chapter goes on to discuss implications for future practice within both the studied organization and higher education and for those developing training as a means of addressing challenges of multigenerational management. Finally, the chapter concludes with future directions for research on the topics of training and multigenerational management.

5.1 Effectiveness of the Training Intervention

Results of the applied intervention suggest that training is an effective approach for making progress toward reducing the management challenges and potentially increasing the opportunities associated with a multigenerational workforce. Participants had statistically significant growth in their self-perceptions of their multigenerational management competency and in their overall performance in a formal assessment of knowledge (including significant improvement in two of the three core components, remembering and applying). These results were affirmed by the post-intervention survey and managers' reports of the impact of the training. Most supervisors responding to the survey indicated that each of the components would be at least somewhat likely to affect their ability to be better multigenerational managers. A discussion of the results as they relate to the three inquiry questions follows.

5.1.1 Inquiry Question One: How Well-Equipped Do Managers Feel Following Training?

Evidenced by statistically significant improvement in managers' reports of their self-competence from pre-test to post-test, the results of this study suggested that managers by and large felt more equipped to manage a multigenerational staff after the training. This was particularly well evidenced in the areas of an improved understanding of workplace preferences and how to manage multiple generations simultaneously.

Broadly, training was able to fill critical knowledge gaps through providing necessary information and guidance in the areas the literature indicates are critical for successful multigenerational management. The negative impact of these gaps on managers' feelings of competence is presented by the literature, which purports that today's managers are being called

to deal with new generations of worker differently and with less available empirical evidence to guide them (Twenge, 2010). This study helped close these gaps particularly in the areas of understanding workplace preferences and in learning approaches to managing multiple generations of staff simultaneously.

5.1.1.1 Increased Understanding of Workplace Preferences

Managers had the greatest improvement in their feelings of confidence related to understanding the workplace preferences of each generation. As described in the literature, strong multigenerational managers are those who can empathize with the different generations including understanding the source of their preferences, values, and expectations (Grubb, 2017; Pollak, 2019). Aligned with developing these areas of competency, the intervention directly involved managers in the role of making an active effort to understand their multigenerational staff, including preferences and context, and know why generations approach life differently. Guided by literature on successful multigenerational management, the training also provided background on the different "needs, goals and motivators" employees of different generations (Eversole et al., 2012, p. 618), information on what each generation needs to be productive (Dokadia et al., 2015), and advice on how to encourage collaboration, to be adaptable, to develop potential, and to embrace differences (McNally, 2017). Managers' results, in both the assessment and the post evaluation, confirmed their increased confidence in utilizing the strengths of different generations to create opportunities. The correlation between increased feelings of competence and this recognition aligns with literature that has found the ability to recognize and build on unique strengths to be a component of effective multigenerational management (Zemke et al., 2013) and one that is critical to the success of generationally diverse organizations (Hannay & Fretwell, 2011).

5.1.1.2 Increased Confidence in Ability to Manage Multiple Generations Simultaneously

Further, a result that likely compounded feelings of confidence is that managers saw the highest overall scores on their feeling of confidence regarding managing multiple generations of staff simultaneously. These findings were enhanced by the post-intervention survey where themes included: growth in approaches to addressing conflict, greater understanding of generational difference (through knowledge and improved listening), and future potential for enhanced empathy or broadened perspective. These results align with intentional elements of the training design, which aligned with literature focused on providing material that was useful and applicable to actual issues (Dirksen, 2016) (participants self-identified instances of multigenerational conflict at work, and case scenarios were based loosely on real occurrences within our workforce). These developments are valuable as the literature regularly discusses managerial expectations have changed over time and across generations. Supervisors are now being called to be more than managers and instead be leaders (Shaw, 2013). Understanding and adapting to generational preferences and addressing points of conflict are critical to success in this increasingly diverse environment.

5.1.2 Inquiry Question Two: How Much Does Training Improve Assessment Performance?

Based on the findings from this study, we can conclude training had a positive impact on managers' capacity to perform well on a formal knowledge assessment. Results of the assessment indicated the training produced statistically significant improvement both overall and in two of the three components, remembering and applying.

5.1.2.1 Significant Overall Improvement in Scores

The overall score results showed statistically significant improvement along with a large Cohen's *d* coefficient that remained even after correcting for a small sample size. A large Cohen's *d* suggests that the impact of the intervention on the assessment was obviously observable (Goulet-Pelletier & Cousineau, 2018). The capacity for training specifically to lead to improved assessment performance is outlined in the literature (Biech, 2017). This training confirmed the effectiveness of the general design recommendations of Biech (2017) and Dirksen (2016) and the multigenerational specific recommendations of Grubb (2017) and Pollak (2019). As part of the process of improvement science, a thorough understanding of knowledge gaps was able to be established both through research within the place of practice and in delivery of a pilot study. The design literature suggests that if needs assessment precedes the development of the training objectives and evaluation criteria, post-training assessments will produce the best results (Biech, 2017). The training design was very intentional particularly as it related to the critical process of identifying the learners (Dirksen, 2016). This included recognizing the participant group was multigenerational and adapting accordingly. The results provide evidence that seems to confirm the positive impact of matching training delivery to the population. As just under 60% of the training population was Millennial, the training emphasized opportunities for teamwork and collaboration, their oft-preferred training style (Grubb, 2017). Millennials had the highest post-test assessment scores of all generations. The training also incorporated a formal presentation and opportunities for asking regular questions, which is in line with baby boomer and Gen X preferences, respectively (Grubb, 2017). This consideration also appears valuable as almost the entire population of each generation improved, which supports the claims found in the literature on the value of a mixed-methods approach to training (Biech, 2017; Dirksen, 2016; Pollak, 2019).

5.1.2.2 Significant Improvement in Remembering and Applying

The training produced a positive impact on performance in the remembering and applying components of the assessment as measured by both their statistically significant improvement in scores and by their medium Cohen's *d* effect sizes, which confirm the results of the assessment correlate to the effect of the intervention and are not just by chance (Goulet-Pelletier & Cousineau, 2018).

The remembering component of the training was built with the intention of challenging preconceived notions and replacing generational stereotypes with characteristics established by research. Each generation of staff has their own style of operation, motivation for working, and expectations within the workplace (Bencsik et al., 2016; Bennett et al., 2012; Iden, 2016; Jerome et al., 2014; Kick et al., 2015; Schullery, 2013; Wiedmer, 2015). Since this component was about providing that information, much of the information from this component of the training was found, fairly literally, in the assessment questions. Thus, while the literature on training suggests improvement on an assessment based on recognition is likely, for this specific component I was not as concerned about the warning that the recognition could be due to recall over learning (Dirksen, 2016) and can still comfortably conclude that this module effectively accomplished its purpose.

I anticipated seeing improvement in the applying component of the training, and the results confirmed this hypothesis. The growth in applying, after stages of remembering and understanding, supports the literature that suggests the effectiveness of Bloom's taxonomy in training design (Biech, 2017). The improved assessment results in a training that was tied to practical application confirms the literature's claim that this approach leads to increased engagement and retention (Dirksen, 2016). Managers' growth in application was critical as

information and understanding are not enough. Generational diversity in the workforce often results in conflict that managers must understand how to mitigate effectively (Akhavan Sarraf et al., 2017; Hillman, 2014), which involves going beyond simply being aware of the preferences of each generation to utilizing best practices for managing the differences that are present (LaRosa, 2014). In practicing applying, Shaw's (2013, 2020) *Five Steps for Leading Through Generational Differences* was also presented as an approach, and the improved scores may also serve to confirm the efficacy of this process.

5.1.2.3 Improved Scores Related to Gen X and to Workplace Differences

Within the individual components of the assessment, the most improvement in scores from pre-test to post-test occurred on questions on the topics of Gen X and workplace differences. Seeing improvement on those two topics specifically aligns with the training literature on learning and novel information (Biech, 2017; Dirksen, 2016). Novel or surprising information is attention grabbing (Biech, 2017) and aids in retention (Dirksen, 2016). Creating opportunities for cognitive dissonance, done in this training through challenging generational stereotypes and pre-conceived notions, also aids in learning (Dirksen, 2016). The finding about Gen X aligns with their prevalence in the workplace and the literature's citation of them as being forgotten. As articulated by Shaw (2013), "no generation feels as misunderstood as Gen X," a generation 25% smaller than the frequently discussed generations before (Baby Boomers) and after them (Millennials). Improved scores related to Gen X in the workplace are valuable as this generation not only claims to feel most misunderstood but also bullied more than any other generation in the workplace (Berk, 2013). Greater understanding of how to work with a generation we know little about could be critical to reduced conflict in a multigenerational workforce.

Improved performance on questions discussing difference is another positive result. Recognition of generational differences is critical to succeeding in and adapting to a multigenerational workforce (Eversole et al., 2012; Hillman, 2014; McNally, 2017). Research has found that managers who understand how generations differ, specifically in work-values, are able to develop policies and procedures that develop more unified values (Hillman, 2014). Twenge and Campbell (2008) concur, stating that companies whose managers understand generational differences at a deeper level beyond technology, "will be more successful in the long run as they manage their young employees, finding ways to accommodate differences in some cases and exert constructive counterpressure in others" (p. 873). Improved recognition of the need to reject a one-size-fits-all approach is critical to multigenerational management and makes these results particularly positive.

5.1.3 Inquiry Question Three: Which Training Component, If Any, Was Most Impactful?

It is clear from the results of the previous two inquiry questions that at least one element of the training was impactful. The conclusion of what was most impactful depends on whether impact is based on results of the post-assessment or on what is suggested by the post-intervention survey. My original intent was to reach conclusions on this question based solely on the post-intervention survey; however, given a lower response rate (16 of 30 participants), I felt it important for the knowledge assessment results to also inform conclusions. These approaches led to two different results. Either the remembering or the understanding module appears to have been the most impactful component of the training.

5.1.3.1 Understanding Component (Breakout Discussion of Generational Conflict at Work)

Based on the post-intervention survey feedback, the understanding module (breakout discussions of generational conflict at work) appeared to be the most impactful component of the training. This result was likely due to the opportunities to engage with other perspectives and practice multigenerational communication. In reviewing survey results, the understanding activity was the only area where 100% of respondents indicated they were at least "probably" certain it would help them to better manage a multigenerational staff. The effectiveness of a discussion-based training component as it relates to multigenerational understanding confirms the literature. Cross generational meaningful communication including small group discussions has been found to be an effective approach for managing a multigenerational workplace (Weiss Haserot, 2018). Multiple facets of discussion make it impactful including allowing for the value of "perspective taking" (Grubb, 2017; Lewis Johnson & Anderson, 2016; Pollak, 2019) in reducing conflicts associated with generational differences (Berk, 2013) and in reducing the likelihood of stereotyping (Shaw, 2013). Ultimately, increased understanding is positive as a critical element in successful multigenerational management (Kleinhans et al., 2015; Lewis Johnson & Anderson, 2016).

5.1.3.2 Remembering Component (Generations True or False)

Based on improvement in assessment scores, the remembering module (generations true or false activity) appeared to be the most impactful. While slightly fewer individuals were at least "probably" certain the activity would improve their ability to successfully manage a multigenerational staff (75%), the assessment scores related to this content saw the most significant improvement. This could have been tied less to the activity itself and more to "learning new information," which tied with group work in being considered the "most effective" training

component. While information could have been learned during any component of the training, it would have been less likely to have been entirely new, which gives me confidence in giving credit to the remembering component for this result despite the informational components of this module being reiterated prior to the understanding module as well. As previously articulated, the literature predicted the improved assessment results in assessments where an opportunity exists for recognition (Dirksen, 2016).

5.1.4 Overall Summary of Training Efficacy

Based on the inquiry questions, we can conclude that training has the capacity to increase managers' feelings of competence and improve their results on a formal assessment. Most valuable to this process appear to be the provision of both new information and opportunities to engage in discussion and apply the information learned. While the results appear to align well with elements of the literature on training, multigenerational management, and generations in the workplace, and multiple authors recommend training in their discussion of approaches toward success in a multigenerational workforce (Al-Asfour & Lettau, 2014; Cappelli & Novelli, 2010; Clifton & Harter, 2019; Grubb, 2017; Pollak, 2019; Shaw, 2013), this study contributes to the literature conclusions specifically related to the efficacy of multigenerational management training as an applied intervention.

5.2 Reflections and Limitations

Based on reflections on the conclusions and results of this study the following limitations should be taken into consideration: (1) improvement outliers; (2) the relationship between timing, the assessment design, and risk of distracted participation, and (3) the majority Millennial study sample.

5.2.1 Improvement Outliers

In reflecting upon the results, I noticed two things that were unanticipated at the beginning of this study and may warrant further consideration: outliers who felt less competent after training and no apparent impact of the Dunning-Kruger Effect (1999) where people tend to over-inflate their self-perceptions. Despite improved feelings of competence for the population, overall, there was a small set of outliers who felt less competent in their management abilities following training, specifically Baby Boomers and those individuals who supervised three or more generations of staff. This finding, although falling contrary to the Dunning-Kruger Effect, is positive as it relates to increased awareness. The literature also seemed to suggest this could occur, explaining that, in the new multigenerational workforce, experienced (and often older) managers may be the ones who require development in the area of supervision but are not as aware of it since management was previously a natural progression based on experience, longevity, and career ladder progression (Grubb, 2017; Pollak, 2019). While not predicted in my initial research, the likelihood of this result was confirmed in a casual conversation after my pilot study where one participant (a baby boomer, Gen X cusper) declared, "I thought I was a competent multigenerational manager, but your training showed me how much I still need to learn." A more formal means of including conversations like

this one in the training design may have proved insightful. This could potentially have been particularly helpful in confirming the theory that the evolution of the multigenerational workforce is creating an unfamiliar environment for even the most experienced of managers and creating an opportunity for training for anyone in a management role not just those managing staff for the first time. Further, the assessment measured five static areas of self-competence; an open-ended response opportunity may have provided specific insight on where learning gaps were present to help guide future training PDSA cycles.

5.2.2 Timing, Design, and Risk of Distracted Participation

The positive results of this study may only have been a partial reflection of actual learning based on the timing of the intervention, the assessment design, and the potential likelihood of distracted participation errors, which was exacerbated both by timing and design.

In addition to the training being conducted in the midst of the Covid-19 pandemic, the two dates January 20th and January 27th, fell shortly after the storming of the nation's capital on inauguration day and during an especially busy time of the year within my place of practice. These dates could not be adjusted, due primarily to the timing of our admissions cycle (Spring is the busiest season.), and the need to attain a power threshold of 30 participants. Further complicating the situation, our office lost 10 staff, including three managers, to turnover between August 2020 and February 2021 compared to five staff in that time span the year prior; this rate made me concerned about losing participants both to turnover and to other obligations due to a reduction in their workforce. Finally, two additional eligible participants were going to be out for paternity leave within two weeks of the selected dates.

As it related to the assessment, although its design was guided by research its content was run through a pilot study and edited for clarity by a member of my committee and its final result was approved by an experienced professional, my advisor, the data collection instruments were not professionally designed or audited to ensure the questions measured what they intended to measure or aligned appropriately with the training intervention. Thus, it is possible that the assessment did not accurately reflect the actual learning that occurred as a result of the training.

Finally, despite positive results it is likely many participants completed components of the training or the assessment in a distracted state due to political occurrences within the month of January as well as the virtual delivery. Several participants admitted that they participated in the training and/or the assessment while multitasking or distracted, which could also have impacted results. The design of the assessment as multiple choice could also have made it easy to accidentally select an incorrect answer particularly if not reading carefully.

5.2.3 Population Demographics

Millennials represented 57% of the participants in this study. Knowledge of this element of my organizations' demographic breakdown influenced decisions in my training design, which intentionally emphasized Millennials' preferred training style of collaboration and teamwork (Grubb, 2017). While the results are still significant (There were very few outliers in improved scores.) and collaboration opportunities are assets to a multigenerational training process (Pollak, 2019), this could be one reason why Millennials outperformed other generations in the final assessment. With this in mind, other researchers should be cognizant of the generalizability of this study's results. If the training developed for this study was deployed within an organization with a different demographic composition, it could potentially have led to different results.

5.3 Contribution to Practice: Three Cs of Cross Generational Workplace Conflict

Inspired by Shaw (2013, 2020) and his five-part process for addressing what he terms generational "sticking points" in the workplace, I sought to develop another applicable methodology toward addressing generational conflict. In reflecting on my own research, it was clear this method would need to be considerate of the reasons multigenerational workforce management is challenging, how these challenges end up as conflicts, and how those conflicts can be made functional, allowing the organization to realize the benefits of generational diversity. In doing so, I came up with three categories for each of the four generations represented in my workplace: 1. Contributing characteristics, 2. Conflict catalysts, and 3. Cohesion creators. I used alliteration and the number three intentionally to increase likelihood of retention. The lists of characteristics were developed by looking at several descriptions of each generation as depicted in various sources (Al-Asfour & Lettau, 2014; Berk, 2013; Cekada, 2012; Clifton & Harter, 2019; Dokadia et al., 2015; Gibson et al., 2009; Grubb, 2017; Lewis & Wescott, 2017; Lowell & Morris, 2019; Seemiller & Grace, 2018; Shaw, 2013, 2020; Underwood, 2007; Zemke et al., 2013) and characterizing them into one of these three areas. The concepts of conflict contributors and cohesion creators were further developed through my understanding of the approaches to multigenerational management put forth by Grubb (2017), Pollak (2019), Shaw (2013,2020), Underwood (2007), and Zemke et al. (2013).

Contributing characteristics are positive workplace values each generation may bring to the workplace. As noted by Grubb (2017), one of the biggest challenges in a generationally diverse workforce is that "employees of any age rarely appreciate what other generations have to offer and instead approach each other with preconceived notions about how an employee of a certain age behaves" (p. 127); thus, designating the differences of each generation as contributing was

130

intentional in suggesting a need for appreciation. Conflict catalysts are the "negative" attributes that generation may bring. And, finally, cohesion creators are the approaches to the different generations that the literature suggests managers can take to get that generation to be satisfied, engaged, and to positively contribute. I suggest that managers: 1. Learn to recognize the contributing characteristics in developing a positive perspective on generational diversity in the workplace, 2. Keep an eye out for the conflict catalysts and how they may emerge around decisions made in the organization, and 3. Learn to execute the cohesion creators in developing a productive and inclusive multigenerational workforce—one that is able to take advantage of all of the benefits age diversity has to offer.

5.4 Implications for Future Practice: Management Training in Higher Education

Three implications for practice emerged as the result of this study: (1) management training should be provided on a recurring basis, (2) management training focused specifically on generations should be conducted, and (3) management training should be treated as a critical component of organizational culture.

5.4.1 Provide Management Training on a Recurring Basis

Several results evidenced the need for management training to occur on a recurring basis as opposed to at a singular point in time. As evidenced in the final results on the training assessment, most participants saw higher scores, but there still remained plenty of room to improve. An iterative training could allow for that. There are also always new learners who can

benefit from training, and it will not always be individuals new to the workforce. This study showed that the most experienced supervisors and those with the most time in the workforce, the Baby Boomers, had the most improvement in formal assessments. At the same time, many in this group also perceived themselves as less competent than they believed they were entering training. These are not the only individuals who can benefit from training. Very few managers can say they have managed four generations of staff, because that was not even possible until roughly one year ago with the workplace entrance of Gen Z. Ultimately, everyone will have room to learn as the five-generation workforce is still a novelty, and more information will emerge about each generation's expectations, preferences, and values, which will create challenges but also opportunities for those managers who are prepared to address these changes.

Further, training should not occur at just one point in time, because change is not just occurring at one point in time. As the workplace diversifies in age, it is simultaneously experiencing changes to traditional hierarchies where promotion is decreasingly based on longevity and more on innovation. There are new needs, preferences, and expectations for managers to be aware of and increased pressure to perform in spite of rapid change. These changes will require behavior and mindset shifts, and, even with training, that level of change only occurs over an extended amount of time (Dirksen, 2016). When it comes to these shifts, there is evidence of the need to practice application and revisit the material (Dirksen, 2016), a need that was also referenced in participant feedback on this study.

Finally, participants recognized the training being brief and having two parts as least effective components; critical feedback focused almost entirely on the conversations and discussions that started but were not completed. The explicit recommendation to revisit the training on a recurring basis was also suggested. This recommendation aligns with literature on training

and multigenerational management, which suggests that, for this type of training to be most effective, the content should be revisited a few weeks after the training (Grubb, 2017) and include follow up discussions (Grubb, 2017; Weiss Haserot, 2018). Training literature speaks to learning design, in general and states that, to produce knowledge retention, training needs to incorporate follow up and post-training action plans for continuous practice (Biech, 2017; Dirksen, 2016). In this case, follow up trainings might be designed to intentionally address areas where there appeared to be gaps in knowledge, understanding, or ability to apply information. These trainings would be intentional about incorporating the elements of the training reported to be most effective, in this case, elements focused on discussion and collaboration, which is an approach evidenced in research for solving generational disconnects in the workplace (Weiss Haserot, 2018). One opportunity could be to incorporate conversation around multigenerational management issues, challenges, or successes into recurring meetings, for advice, feedback, and group discussion.

5.4.2 Provide Training Specific to Generational Diversity

In the course of completing the trainings and asking participants to identify instances where they observed generational-specific conflict at work (a component of the understanding module), there were no shortage of examples, anecdotes, or identified frustrations. Some specific examples included inflexibility surrounding work-life balance, refusal to give authority to individuals of younger generations who were in charge of projects, and debates over workplace communication styles (e.g., meetings vs. emails). Participants also notably saw growth in their understanding of difference but not in similarities despite that knowledge also being important for successful multigenerational management (Arendt et al., 2014; Hannay & Fretwell, 2011). In order to be successful in a multigenerational environment, "all workers must be open to embracing different

133

perspectives and be willing to learn and adapt" (Lewis Johnson & Anderson, 2016, p. 71). Managers must also understand the values of each generation into order to both embrace differences and emphasize common goals (McNally, 2017). Training plays a critical role here as managers still have very little information on how to address these multiple generations (Twenge, 2010) and "their potentially diverging motivational needs" (Heyns & Kerr, 2018, p. 1). This is evident, and the prevalence of discussion on the likelihood of witnessing generational conflict in the workplace is also supported by no small amount of literature (Cappelli & Novelli, 2010; Grubb, 2017; Iden, 2016; Miller et al., 2013; Pollak, 2019; Shaw 2013, 2020). Yet, the four or even five generation workforce is inevitable for higher education. Organizations will have to take specific steps related to the generational diversity of their workforce in order to be successful.

5.4.3 Make Participation in Generational Management Training a Formal Requirement

As was articulated in the reflections, being tied to a calendar, deadlines, ideal timing, and convenience sampling created challenges for this study that may have limited its impact. Feedback from both the pilot study and the final intervention suggested the training needed to occur more than once and extend beyond two hours, which was hard to accomplish as part of a standard workday during a busy part of the year when the training was considered optional. However, the critical role of strong multigenerational management suggests organizations should not simply allow their managers to opt in or out. As has been articulated throughout this study, managers matter. If managers are not able to successfully manage a generationally diverse workforce, organizations will not be able to successfully address the related conflicts or realize the benefits, and poor management comes at a cost. As inconvenient as an optional training may seem, organizations should keep in mind that turnover generally costs organizations approximately 20%

of an employee's salary (Boushey & Glynn; Schroth, 2019) and that failure to engage employees and employee turnover are directly correlated (Akhavan Sarraf et al., 2017; Clifton & Harter, 2019). These costs are not negligible as higher education leaders are being called to do more with fewer resources (Kleinhans et al., 2015). This is all occurring in an increasingly competitive environment where generational diversity could stand to be a critical competitive advantage if fostered and maintained (Lewis & Wescott, 2017).

As stated by Berk (2013) (and I agree), "the current generational composition of faculty, administrators and staff in colleges and universities is more diverse and complex than at any point in higher education" (p. 20). This diversity plays a critical role on the academic work environment impacting relationships, job satisfaction, and productivity. Research suggests the key to strengthening multigenerational workplace relationships is to improve management skills and understanding of generational differences (Lewis & Wescott, 2017). While the field stands to face the risks of failing to deal with the challenges, we also have an opportunity to embrace the advantages of diversity; management training can provide the capacity for both, and the manager impacts the success of the entire organization (Clifton & Harter, 2019). Berk (2013) postulates higher education organizations need to be proactive if they hope to circumvent the consequences of failure to address generational diversity; this study evidences the same conclusion. It is better to address generations and their workplace differences in advance and systemically prior to the almost guaranteed interpersonal conflicts occurring, conflicts that are only natural when it comes to individuals with "systematic differences in perspectives" (Berk, 2013, p. 11).

5.5 Implications for Future Practice: Management Training Development

Based on this study, I make the following recommendations for practice: (1) assess the organization as a whole, (2) emphasize active engagement and discussion, and (3) consider incorporating Bloom's taxonomy into the training design.

5.5.1 Assess the Organization as a Whole

Although this particular study was conducted within a singular place of practice and assessed as a one-time intervention making the design appropriate in context, I would suggest a broad approach for determining the impact of training wherever scope and duration will allow for it. A generationally inclusive organization will rely on more than the competence and knowledge of any one manager. As can be seen throughout this discussion, training did have a positive impact on manager performance on a knowledge assessment and also on their self-report of competence. However, no method has yet been applied beyond the data and the survey responses to gauge whether participants have been able to successfully apply what they learned, which is critical for achieving the long-term goals associated with this training. The literature postulates that this is a common challenge. As stated by Rumbley et al. (2018), "there is very little indication that training programs are undertaking the kind of assessment activities that yield clear evidence of their mid-term outcomes or longer-term impact" (p. 6). Future studies could measure impact at multiple points in time with this aim in mind. This measurement might include collecting additional feedback from managers after multiple training iterations as well as soliciting additional feedback from the staff they supervise.

In broadening this approach, I would also recommend deploying an assessment tool to measure the entire organization before and after its managers have undergone training. One example is the inventory designed by Zemke et al. (2013), "How cross-generationally friendly is your work group, department, business, or organization?" (p. 287). A series of mindset shifts and ultimately a culture shift would have required a longer timeframe than was available for this study; however, this training laid the foundation. As guided by what makes an organization "generationally friendly," steps could include looking at policies and assessing them for generational friendliness, taking intentional steps to hire diversity representative of the generations joining the workforce, and incorporating cross-generational discussion into the fabric of the organization. This could include intentionally creating generationally diverse teams for projects or initiatives or establishing a cross generational mentorship program.

5.5.2 Emphasize Active Engagement and Discussion

This study had the positive characteristics of making this topic front of mind and making supervisors more aware of generational issues and how they might approach them. In the case scenarios, managers were able to successfully identify generational conflicts and generate solutions utilizing knowledge from the first training along with a series of handouts and documents. Both the literature and the results of this study confirm that active engagement and discussion are valuable components to a training design for multigenerational management. Weiss Haserot (2018) makes the case for organizations to host a "Cross-Generational Conversation Day" to advance "engagement, productivity, meaningful communication, and collaboration among the many generations at work" (p. 153). While I argue a single day would be insufficient, I concur and saw evidenced in my research that these conversations matter and have an impact. The two

components of the training dedicated to discussion (understanding) and application (applying), saw either self-reports of strong impact (understanding) or significant improvement in assessment scores (applying). That being said, it is yet to be seen whether this process was effective enough to ensure the knowledge extended into actual practice. Future trainings could include opportunities to observe growth through involving not only managers but also the staff they are leading. I would also seek feedback from staff on the effectiveness of their managers before and after training. Finally, as a more practical design implication given the numerous articulated benefits of perspective taking and the post-intervention feedback of participants that suggested needing more time for engagement and discussion, it would have been better for the training design to have incorporated less presentation of information and more time for active engagement, learning from peers, and putting the information into practice.

5.5.3 Consider Applying Bloom's Taxonomy to Training Design

Research on the use of Bloom's taxonomy in training design is mixed. On one hand, the taxonomy is easy to utilize and helps in setting clear objectives (Biech, 2017). On the other hand, what a trainer may want to teach may only require engaging one level of the taxonomy and not always in progressive order, and thus the taxonomy's design would not be appropriate (Dirksen, 2016). As it relates to generations, I see value in the progression; you need to be able to know and remember information about the generations before placing these preferences into context, and the information and the context are both critical for considerate application. Ultimately, designing the training in line with Bloom's taxonomy appears to have been a successful approach, for this study as reflected by the improvement in assessment scores in each area and statistically significant improvement in all but one. Future research could evaluate this conclusion by measuring higher

order levels of the framework: analyzing, evaluating, and creating. If after training, managers were clearly able to understand generational challenges in the workplace, generate ideas, and create solutions, it could help solidify this specific progression was impactful. I would encourage future researchers interested in applying this model to incorporate all six components of Bloom's taxonomy into their study.

5.6 Implications for Future Improvement Science-Based Research

Based on what was learned in this study, it is clear that there is plenty of opportunity for additional improvement science-based research on adapting to the multigenerational workforce. As stated by Shore et al. (2018), "never before has cooperative research been so necessary among scholars and practitioners as in the case of inclusion" (p. 189). After completing this dissertation in practice, I have identified or confirmed a need for additional research on the following: (1) training as an intervention, (2) generational diversity and workplace conflict in higher education, and (3) multigenerational management in higher education. Not based on this study but for those scholars considering generations as a topic of research, particularly those focusing on younger, more diverse generations, I would recommend conducting additional research on the validity of generational constructs disaggregated by race, ethnicity, sexual orientation, and any other relevant facets of identity that may impact culture and worldview.

5.6.1 Research on Training as an Intervention

As previously articulated, training has been recommended as an approach to managing multigenerational workforce conflict (Al-Asfour & Lettau, 2014; Cappelli & Novelli, 2010; Clifton & Harter, 2019; Grubb, 2017; Pollak, 2019; Shaw, 2013), although it is most often presented in conclusions or discussions and not formally studied for its efficacy. Training in general has been confirmed to be a strong tool for the transfer of knowledge and for management development, so it could (but should not) be assumed it would also assist managers in being successful in this subject area. More research on whether training produces a positive impact on organizations success in a five-generation workforce could be a substantial contribution to practice as more and more organizations begin to realize the critical value of supporting, retaining, and engaging their most valuable asset, their people.

5.6.2 Research on Generational Diversity and Workplace Conflict in Higher Education

As stated by Kleinhans et al. (2015), "Just as the academy has had to embrace issues brought on by increased racial and ethnic diversity on campuses, it must now sensitize itself to the varied work-life balance needs of the multigenerational workforce" (p. 100). Generational diversity is a topic ripe for future dissertations in practice since the five-generation workforce is hardly a year old. The 2020 entrance of Gen Z, technology, and possibly the pandemic stands to exacerbate the speed at which new generations emerge. Research on multigenerational work values remains limited particularly as it relates to younger generations and to higher education literature where "almost nothing" appears on the topic of the multigenerational workforce (Berk, 2013, p.10). Research conducted through this study and within the place of practice which motivated this

study confirmed the theoretical framework of generation theory as a construct that is real and one that can lead to miscommunication, to conflict, and to a lack of inclusion that results in reduced staff satisfaction, missed opportunities for functional conflict and innovation, and turnover. While the basis for the study contains insight gained from other institutions, through experience, observation, and questioning, it is important to note, this study only represents a single place of practice and contained a small number of participants, thus limiting my ability to make definitive inferences for the quantitative data. As postulated by Rumbley et al. (2018) on training, in general, it remains difficult to draw conclusions as most programs have fewer than 50 participants. They also critique the homogeneity of the traditional training cohort. This training does positively contribute to this regard as the population was diverse in job title, years of experience, functional area, and generation. There is not enough data provided by this research, however, to generalize the results of this study to an entire field or industry. Presented by Hillman (2014), "it may be necessary for the manager to implement systems and procedures that are appropriately designed to meet the needs of four generations of employees and also align with the goals and objectives of the organization" (p. 250). Responding to a multigenerational workforce is added pressure on managers and practitioner research; being grounded in improvement science could provide the support they need to navigate this new frontier successfully.

5.6.3 Research on Multigenerational Management Training in Higher Education

As of today, multigenerational management training remains an emerging topic in the literature. While training comes up often as a recommendation, it remains largely unstudied, and mentorship dominates the space of interventions targeting the complexities of the multigenerational workforce. However, training is a resource that has been evidenced in the

literature and in this dissertation in practice to have a positive impact on learning and to contain the elements to address a situation for which there is no guidebook, the first five-generation workforce. Like prior research, this study found very little formal research focused specifically on multigenerational management or training specifically related to higher education despite the research available that suggests why these challenges would exist and even be exacerbated for our field. This study contributes to the scholarship an approach to conquering the challenges and embracing the opportunities that come with the generational diversity of our industry. Like elsewhere, our success in higher education and admissions and financial aid starts with the success of our people, our managers.

5.6.4 Research to Confirm Generational Values and Preferences for Diverse Populations

Finally, although this recommendation is not based specifically on the results of this study, future researchers using generational cohort theory as a framework should consider taking steps to confirm if generational workplace values and preferences remain consistent in studies of diverse populations. While Baby Boomers have dominated the workforce historically, over twice as many Millennials (the now dominant group) and even more Gen Zs identify as racial or ethnic minorities as did in that generation, the generation that has guided the workforce design of today. This training and much of the literature are based in the research-supported conclusion that the idea of generational cohorts and associated expectations, values, and preferences, discovered in that workforce, is a valid construct.

Current research tends to disaggregate by very few demographic factors, most commonly: generation (Dokadia et al., 2015; Gibson et al., 2009; Westerman, 2007), age (Bencsik et al., 2016, Cogin, 2012; Yang & Matz-Costa, 2018), and/or gender (Cogin, 2012; Dokadia et al., 2015; Heyns

& Kerr, 2018; Mencl & Lester, 2014; Yang & Matz-Costa, 2018). Race, in particular, is notably absent in most studies (Some exceptions are Yang and Matz-Costa (2018) who notes 85% White and Heyns and Kerr (2018) who notes 77% Black (conducted in South Africa)). However, most researchers appear to be confident in their results based in the conclusion articulated by Zemke et al. (2013), "generational commonalities cut across racial, ethnic, and economic differences" (p. 16). I too assume this to be accurate for this research as the few longitudinal studies that exist today on the topic of generational diversity utilized a dataset considered to be nationally representative, which appears as if it may be what gives authors confidence in their generalizations (Twenge & Campbell, 2008; Twenge, 2010). I would encourage a future researcher to conduct a study that disaggregates preferences beyond generation, age, and gender. I would argue that race, in particular, could impact the social and historical experiences that define each generation particularly as it related to the workforce.

In conducting the initial research for this study, I disaggregated supervisee responses to the Cross-Generational Management Satisfaction Survey (Table 1) by both race and generation as I believed either diversity characteristic could be impacting workplace dissatisfaction. This disaggregation produced some interesting results including: (1) Black and Hispanic/Latino staff were substantially less satisfied than White staff with their workplace (30% vs 46% extremely satisfied) and with their functional area (10% vs. 23%), (2) White staff were more confident how they are managed impacts their satisfaction (58% vs. 50%) and (3) Black and Hispanic/Latino staff were more likely than White staff to have told their supervisor how they preferred to be managed (60% vs 54%) but less likely to have felt comfortable doing so (80% vs 85%).

These results challenged me to reflect on whether basing assumptions of generational preferences, values, and expectations on aggregate data representative of the workforce of the past

was too limited, and I would encourage future researchers to consider this possibility, as well. While it is possible generations would share characteristics regardless of race, without confirming this, generation-based trainings may fail to address the broad needs of an increasingly racially and ethnically diverse workforce and researchers may need to consider the need to confirm the accuracy of the expectations, values, and preferences.

5.7 Conclusion

A critical gap exists in the increasingly diverse field of higher education, and that is dedicated time to training supervisors. As articulated by Rumbley et al. (2018):

> As higher education systems continue to grow and diversify, increasingly pressured to meet key performance indicators, while also achieving excellence in education and innovation production, the need to train effective managers and leaders becomes more widespread and more urgent. Yet, the current picture of training opportunities on offer to meet this massive need falls desperately short. (p. 6)

While some, albeit limited, research exits on the merit of addressing generational conflict in academia and these studies provide recommendation for practice (Berk, 2013; Kleinhans, et al., 2015), this dissertation in practice appears to be the first assessing training as an intervention specifically designed for the challenges of multigenerational management in higher education. The literature in this space will need to continue to expand. Lowell and Morris (2019) state that training will be a critical tool to remain competitive as organizations and leaders need to understand their talent in a workplace where over half a decade may separate the older and younger workforce. This study supports that conclusion.

Within my specific place of practice, this study has at minimum started conversations about generational difference and the value of training new managers. I am unsure how much it has done

144

to shift mindsets or behaviors, but that would be challenging to measure given both the duration of the study and the extremely unique environment we are in (e.g., remote workforce during a global pandemic). Given managers' willingness to participate in this study and the conversations that continue today, it seems that our organization understands that generational diversity can be a great asset to us. We are challenging ourselves to adapt the mindset of who we serve, be it our staff (often of varying generations) or our students (predominately Gen Z) and understanding of generational preferences and the reasons behind this has helped with that. There is still more potential yet to be realized, and this study could benefit from additional iterations focused on application of the learned information.

This study's findings should encourage higher education leaders to consider training as a means of preparing for and adapting to a multigenerational workforce. Training was shown to impact managers' perception of their own competence, to improve their ability to perform on a generational knowledge assessment, and to provide valuable new information and active opportunities to develop understanding. The results also indicate that, when it comes to successful multigenerational management, there is value in training for managers of all generations and lengths of experience not just for those who have not previously managed or those who are new to management roles.

The evidence behind the necessity to react to increasing generational diversity is evident, both for obtaining benefits and avoiding risks. Diversity has been shown to provide companies that embrace it with productive advantages (Dokadia et al., 2015; Hillman, 2014; Patrick &Kumar, 2012; Twenge & Campbell, 2008) specifically including innovation, creativity, and reductions in groupthink (Clifton & Harter, 2019; Grubb 2017) and an increased capacity to compete in an increasingly global market (Lewis & Wescott, 2017; Patrick & Kumar, 2012). Organizations that

fail to react to the generational diversity of their workforce will likely face conflict (Grubb, 2017; Miller et al., 2013; Zemke et al., 2013), limitations on productivity (Grubb, 2017), turnover (Grubb, 2017; Lewis Johnson & Anderson, 2016; Weiss Haserot, 2018), low engagement (Grubb, 2017; Yang & Matz-Costa, 2018), communication challenges (Grubb, 2017; Shaw, 2013, 2020; Weiss Haserot, 2018), risk of legal liability (LaRosa, 2014; Weiss Haserot, 2018), and reduced morale (Lewis Johnson & Anderson, 2016) just to name a few. This study recognized several of these challenges occurring within the identified place of practice and the training intervention was designed to intervene. As it stands today, the substantial amount of generational diversity in higher education workforce could be the very thing that helps keep us competitive as we transition into what are predicted to be some of the most challenging and competitive years the field has yet to face. Training managers (the individuals to whom research have proven organizational success is tied) presents the opportunity for a more content and more competitive multigenerational workforce; the research shows, and this study supports that it is worth a try.

Appendix A Mission and Vision of OAFA

Our mission is as follows: "to attract, recruit, enroll and acclimate a diverse group of students in numbers sufficient to meet the University of Pittsburgh enrollment targets and to assist all students in funding throughout their collegiate career." Our vision is that we will "become a leader in college and university enrollment management services by developing processes and practices that are student centered and cutting edge." In addition to our mission and vision, seven core values frame our work:

1. **Collaboration**: OAFA staff collaborate internally with each other and with other Pitt schools, colleges, departments, and campuses as well as externally with prospective students, current students, parents, alumni, and vendors to fulfill our mission.
2. **Accuracy**: Decision making happens nearly every minute in OAFA – from vendor contract decisions to life-changing admissions decisions. Accurate decisions are vital to the success of OAFA to empower staff to make decisions with confidence.
3. **Transparency**: In OAFA, decisions do not happen in a vacuum. The data used to make decisions and the decisions themselves are open for others to view so that they may understand how decisions are made.
4. **Speed**: Being first does not always equate being best but lagging can result in being left behind. Being on the cutting edge, as stated in our vision, occurs by moving quickly when possible and done in conjunction with our other values.
5. **Confidentiality**: OAFA needs personal information to make decisions, but that personal information needs to be held confidential. Given public security concerns and data breeches, the staff are hyper vigilant that any information is confidential information.
6. **Diversity**: Students come to the University of Pittsburgh, in part, to experience diversity. This includes diversity of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies.
7. **Customer Focus**: At the core of what we do is the student. Whether we are recruiting students to Pitt or assisting students with funding their education, they are the most important audience we serve, and we keep them at the center of our work.

Appendix B Foundational Survey and Informational Interview Feedback

- **Informal research**
  - "My manager treats me as if this is my first job because this is an entry level role in our office"
  - "I have 10+ years of experience, and don't understand why I can't be given more autonomy"
  - "My boss behaves like they are my parent; I don't need that level of instruction"
  - "This is not my first job; I do not need to be micromanaged"
  - "I could figure out how to get things done, if left to figure it out my way"
- **Formal research, quantitative survey**
  - **Survey #1: Confirm Staff Satisfaction is an Issue (n=38)**
    - 80% of supervisors and 44% of those supervised would probably or definitely not be surprised by turnover
    - Only 60% of supervisors and 46% of those supervised feel our office is appropriately concerned about turnover
    - 70% of supervisors reported being extremely comfortable managing staff of a different generation
    - Only 40% of Supervisors, and 29% of those supervised, responded "no" when asked if our office is built in such a way that it favors a certain generation of staff
    - Of those who were confident our office favors a certain generation, 50% of Supervisors feel our office favors Millennials, 38% of those supervised feel our office favor Gen X
  - **Survey #2: Confirm Managers as the target population for an intervention (n=21)**
    - Only 37% of all staff confidently reported that their manager was aware of how they would like to be managed
    - 72% of staff felt, to some degree, their title or position dictated how they were treated
    - 72% of staff felt that "for better or worse" their manager treated all staff with the same title the same
    - Only 14% of staff felt their manager tailored their management approach to the personal preferences of their staff more than to the individuals' role in the office

Appendix C Cross- Generational Management Satisfaction Survey

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Start of Block: Default Question Block

Thank you for taking the time to complete this survey. The expected length of time to complete is no more than three minutes. The results will be utilized to assist in the development of a training for managers to be built in support of workplace satisfaction within OAFA.

Q1 Which generation are you a member of?

○ Baby Boomer (Born 1946-1964) (1)

○ Gen X (Born 1965-1979) (2)

○ Gen Y (Millennial) (Born 1980-1996) (3)

○ Gen Z (Born 1997-2012) (4)

Q2 Those born in-between generations are sometimes referred to as "cuspers", do any of the following apply to you?

○ Yes, Baby Boomer "cusper" born between 1955 and 1965 (1)

○ Yes, Gen X "cusper" born between 1977 and 1985 (2)

○ Yes, Gen Z "cusper" born 1995 or later (3)

○ No, I am not a "cusper" (5)

Q3 What is your race/ethnicity? (this information is utilized for assessing if different demographic populations experience these challenges differently)

○ African American/Black (1)

○ Asian (2)

○ Hispanic/Latino (3)

○ White (4)

○ Other (5) _____

○ Prefer Not to Identify (6)

Q4 What is your primary area of responsibility? (can indicate more than one, if applicable)

○ Administration/Human Resources (1)

○ Financial Aid (2)

○ Marketing and Communication (3)

○ Data/Systems (4)

○ Visitor Engagement (5)

○ Recruitment (6)

○ Operations (7)

○ Transfers (8)

○ Prefer not to say (9)

Q5 What is your title? (optional)

_____

Q6 Do you supervise staff?

○ Yes (35)

○ No (36)

Q7 How well do you feel your immediate supervisor understands what you need to be successful in the workplace?

○ Extremely well (13)

○ Very well (14)

○ Moderately well (15)

○ Slightly well (16)

○ Not well at all (17)

Q8
Do you feel as if your immediate supervisor understands how you prefer to be managed?

○ Definitely yes (6)

○ Probably yes (7)

○ Might or might not (8)

○ Probably not (9)

○ Definitely not (10)

Q9 How would you rate your current level of satisfaction with your workplace (OAFA)?

○ Extremely satisfied (18)

○ Somewhat satisfied (19)

○ Neither satisfied nor dissatisfied (20)

○ Somewhat dissatisfied (21)

○ Extremely dissatisfied (22)

Q10 How would you rate your current level of satisfaction with your primary functional area (i.e., recruitment)?

○ Extremely satisfied (18)

○ Somewhat satisfied (19)

○ Neither satisfied nor dissatisfied (20)

○ Somewhat dissatisfied (21)

○ Extremely dissatisfied (22)

Q11 Do you feel how you are currently managed impacts your workplace satisfaction?

○ Definitely yes (12)

○ Probably yes (13)

○ Might or might not (14)

○ Probably not (15)

○ Definitely not (16)

Q12 Have you expressed to your immediate supervisor how you prefer to be managed?

○ Yes (23)

○ No (24)

Q13 Do you feel comfortable expressing to your immediate supervisor how you prefer to be managed?

○ Yes (23)

○ No (24)

End of Block: Default Question Block

Appendix D Participant Recruitment Email Sent by Faculty Mentor on Behalf of PI

Hello,

I hope you are well. My name is Linda DeAngelo, and I am writing on behalf of Lauren Wright as her faculty mentor for the research on which she is the Principal Investigator.

As you may know, Lauren is a doctoral candidate here at the University of Pittsburgh.
For her research, Lauren has designed a training intervention, intended to support managers within the Office of Admissions and Financial Aid in successfully navigating the challenges of managing in an increasingly multigenerational workforce. The goal of this project is ultimately to make your job easier as supervisors, and develop, or enhance your skills in supporting an age diverse staff, for the ultimate benefit of our shared organization. If effective, this intervention has the capacity to serve as a great, free, professional development opportunity in an increasingly important management area.

This intervention will involve completing a series of three virtual training modules via Zoom, each no more than an hour in duration, along with two, brief, pre- and post- assessments, and an optional, post-study survey.

We are not aware of any risks to you of participating in this intervention, and while you will be assigned a unique identifier to pair the results of your pre- and post-tests, all distribution will be done through Qualtrics, allowing your responses to remain anonymous. Your individual assessment results will be kept completely confidential. However, please keep in mind that you will be visible during the training modules, so others will be aware of your participation.

The initial pre-test should take no more than 20 minutes to complete. Your participation is entirely voluntary and there is no compensation provided, nor is there any negative penalty for choosing not to participate, or for leaving the study at any time. All participants will be given access to an aggregate summary of the results but, no participants will be able to be uniquely identified from the results However, as with any research you should approach participation understanding the possibility of a breach of confidentiality, though encryption methods will be deployed to reduce the likelihood of this occurrence.

You can also reach out to Lauren at 412 624 4096 or lauren.wright@pitt.edu with any questions. If you are willing and able to participate, please complete the enclosed assessment within two weeks of receipt of this email. Completing the assessment will serve as your consent to participate.

We very much understand the value of your time and sincerely appreciate your support and effort in making this study possible.

Sincerely,

Linda DeAngelo and Lauren Wright

Appendix E Protocols

Initial Assessment (Pretest), Managers

Thank you for agreeing to participate in my study. As a refresher, for my Dissertation in Practice, I am studying the how to support managers in successfully navigating the challenges of managing a multigenerational, workforce. The hope is that our development, in this area, will increase overall workplace satisfaction, and long-term retention, both for us, and for our staff. Please note, that it is important to be as honest as possible in your perception of your own competencies, and to answer all questions to the best of your ability, in order to be able to evaluate the benefit gained (or lack thereof) of the training intervention that will follow this initial assessment.

In support of a goal of full transparency, you can submit your responses anonymously, should you so choose. You will be assigned an ID through Qualtrics that will allow me to compare your responses from the initial assessment to the one following completion of the training modules. You will have the option of providing your name, if you would like to be sent your results, both before and after the implementation of the intervention.

If you have read any of this and no longer wish to participate, please feel free to exit the assessment, at this time, and know your time was still appreciated. Thank you once again for your time and commitment to this effort.

Final Assessment (Posttest), Managers

Thank you again for your participation in this study. At this point you should have taken part in a three-part training on multigenerational workforce management. Please do not continue with this assessment if you did not yet complete the training, live, or independently, as the specific goal is to measure its impact on performance, and self-perceived competence from the initial assessment until now. For those who have completed both the training and the initial assessment, you will be given the same assessment, with one additional, optional, question for those who may be willing to respond to a few follow up questions about the effectiveness of the training.

If you have read any of this and no longer wish to participate, or no longer qualify, please feel free to exit at this time, and know your time was still appreciated. Thank you once again for your time and commitment to this effort.

Managerial Training Pre and Post Test – Revised- OASIS

Start of Block: Introduction

Thank you for agreeing to participate in my study. As a refresher, for my Dissertation in Practice, I am studying the how to support managers in successfully navigating the challenges of managing a multigenerational workforce. The hope is that manager development in this area will help reduce conflict caused by generational diversity in the workforce and, further, assist us in taking advantage of the benefits of this diversity for our organization. Please note, that it is important to be as honest as possible in your perception of your own competencies, and to answer all questions to the best of your ability, in order to be able to evaluate the benefit gained (or lack thereof) of the training intervention that will follow this initial assessment. In support of a goal of full transparency, you can submit your responses anonymously, should you so choose. Below, you will be assigned an ID through Qualtrics that will allow me to compare your responses from the initial assessment to the one following completion of the training modules. You will have the option of providing your name and email if you would like to be sent your results, both before and after the implementation of the intervention. If you have read any of this and no longer wish to participate, please feel free to exit at this time, and know your time was still appreciated. For those moving forward, thank you once again for your time and commitment to this effort!

Here is your Random ID ${e://Field/Random%20ID} (This number is randomly generated by Qualtrics and will allow your responses and performance on this assessment to remain completely anonymous, should you so choose. Please save this number for your records as, should you choose to remain anonymous, you will need to provide it on the follow-up assessment so your pre and post results can be matched appropriately.)

Which generation are you a member of?

○ Baby Boomer (Born 1946-1964) (1)

○ Gen X (Born 1965-1980) (2)

○ Gen Y (Millennial) (Born 1981-1996) (3)

○ Gen Z (Born 1997 or later) (4)

How long have you supervised staff? (this question refers to supervision in any capacity, not just within this office, or your current role)

○ Less than 5 years (3)

○ More than 5 years and less than 10 years (4)

○ More than 10 years and less than 15 years (5)

○ 15 years or more (6)

Do you currently, or have you previously supervised, more than one generation of staff, at the same   time?

○ Yes (17)

○ No (19)

○ Unsure (18)

Which generations of staff do you currently manage (please select all that apply)?

☐ Baby Boomer (18)

☐ Gen X (19)

☐ Gen Y (Millennials) (20)

☐ Gen Z (21)

☐ I do not currently supervise staff (23)

Where do you currently work?

○ Pitt- Office of Admissions and Financial Aid (1)

○ Pitt-Regional Campus (2)

○ Other (4) _____

End of Block: Introduction

Start of Block: Self-Evaluation

Please evaluate your perceived self-competency in each of the following five areas. Remember these responses can remain anonymous.

I know how to alter my management style toward the preferences of my staff

○ Strongly agree (23)

○ Somewhat agree (24)

○ Neither agree nor disagree (25)

○ Somewhat disagree (26)

○ Strongly disagree (27)

I understand the workplace preferences of each of the four generations

    ○ Strongly agree (13)

    ○ Somewhat agree (14)

    ○ Neither agree nor disagree (15)

    ○ Somewhat disagree (16)

    ○ Strongly disagree (17)

I feel confident in my ability to manage multiple generations of staff, simultaneously

    ○ Strongly agree (20)

    ○ Somewhat agree (21)

    ○ Neither agree nor disagree (22)

    ○ Somewhat disagree (23)

    ○ Strongly disagree (24)

I am able to successfully diffuse conflict between staff of different generations

    ○ Strongly agree (13)

    ○ Somewhat agree (14)

    ○ Neither agree nor disagree (15)

    ○ Somewhat disagree (16)

    ○ Strongly disagree (17)

I know how to utilize the unique strengths of different generations to create opportunities within my team

○ Strongly agree (11)

○ Somewhat agree (12)

○ Neither agree nor disagree (13)

○ Somewhat disagree (14)

○ Strongly disagree (15)

End of Block: Self-Evaluation

Start of Block: Remembering

The questions that follow relate to the most commonly identified workplace characteristics of the four generations of staff currently in the workforce. While generational preferences are a debated topic, and not every member of each generation will share the same characteristics, "Correct" answers are based are research findings on multigenerational workplace preferences. Do your best to select answers based on what you know objectively over what you believe to be true based on observation.

According to research, which statement most accurately describes Baby Boomers in the workplace...

○ Baby Boomers are loyal, competitive, hard workers, who value clear hierarchy and expect to have their opinions heard and valued regardless of their title (1)

○ Baby Boomers are committed workers with strong work ethic, who value efficiency, emerging technologies, and are open to change (2)

○ Baby Boomers are independent, loyal, leaders who expect professional development at every work stage (3)

○ Baby Boomers are team-oriented and mistrusting of organizations, they are practical rule followers (4)

According to research, which statement most accurately describes Generation X in the workplace...

○ Generation Xers are optimistic, hard workers, who expect efficiency and value collaboration (1)

○ Generation Xers expect efficiency, balance, and flexibility, and they are practical and distrusting of authority, they will move out to move up and feel an organization is responsible for their development (2)

○ Generation Xers are noted multi-taskers, who feel work-life balance is critical, they are independent problem solvers who feel it is more efficient to get work done themselves and are uncomfortable with traditional hierarchy (3)

○ Generation Xers are we-centric, they are practical, they respect authority and traditional hierarchy, and are notably optimistic (4)

According to research, which statement most accurately describes Millennials in the workplace...

○ Millennials are team-oriented, multi-taskers, they are comfortable with traditional hierarchies but expect to have their opinions valued regardless of their level in the organization (1)

○ Millennials are independent problem solvers and efficient multitaskers with a strong grasp of technology, they prefer autonomy but are comfortable working with groups (2)

○ Millennials are collaborative workers who desire flexibility, balance, feedback and recognition, their grasp of technology has made them outstanding multitaskers (3)

○ Millennials are we-centric workers, who respect authority, and desire flexibility, they are optimistic and will be loyal to an employer who is loyal to them (4)

According to research, which statement most accurately describes Gen Zers in the workplace...

○ Generation Zers are independent workers would choose purpose over high pay, they are we-centric and expect diversity, flexibility, and efficiency in the workplace. (1)

○ Gen Zers are collaborative workers, however, prefer to do so electronically, they desire to make a difference, and expect to work 9 to 5 hours with time after work reserved for their passions (2)

○ Gen Zers are uncomfortable with traditional hierarchies, and expect their opinions to be valued despite being new to the workforce, they have a practical perspective that work is about pay (3)

○ Gen Zers value constant connectedness, and desire open workspaces, they believe that their home life and work-life should not overlap, they expect flexibility in their roles and believe diversity is critical (4)

End of Block: Remembering

Start of Block: Understanding

The following questions relate to the historical events that are have said to determine the behaviors and expectations of each generation. Developing a better understanding of what motivates their preferences can help in appreciating the similarities and differences between multiple generations in the workplace and applying this knowledge to reduce conflict and create opportunities afforded by diversity.

According to research, which major event and/or common occurrence did not play a role in Gen X's view of the workplace?

☐ Era of corporate downsizing (1)

☐ Era of increased divorce rate (2)

☐ Era of slowed technological growth (3)

☐ Era of global competition for jobs (5)

True or False: According to research, despite growing up as digital natives, Gen Z, very much values facetime with their supervisors

○ True. Gen Z both values and expects facetime with their supervisors, they feel this is necessary for building real relationships to get their opinions heard (1)

○ True. Gen Z values facetime but does not expect much of it to occur within the workplace, it is impractical, and they feel it would be much easier to talk to their supervisors via text. (2)

○ False. Gen Z is more comfortable with an email or text message with both supervisors and colleagues, as this is how they are used to communicating (3)

○ False. Being used to digital communication with their friends via social media, Gen Z does not place any special value on facetime with employers (4)

According to research, which generation is most likely to emphasize visual connections at work and want to set up meetings?

○ Baby Boomers, they grew up in the broadcast era where they learned to emphasize the visual and the value of a good presentation (1)

○ Gen X, they had new technologies of email and cellular phones and really missed the reduced opportunities for face-to-face communication (2)

○ Millennials, they grew up with rapid technology, what better way to connect instantly than connect in person (3)

○ Gen Z, the internet lets them collaborate on everything, they want this in the workforce (4)

According to research which is true of Baby Boomers as it relates to work-ethic?

○ The size of their generation trained them to work hard and compete in the workforce, due to the population boom everything was crowded when they grew up, if opportunity was limited you had to work hard to be the best (3)

○ They grew up being taught that they were special, and were a generation of focus for years prior to millennials, so they work hard for the pride of a job well done, but don't feel any particular urgency to compete (4)

○ They grew up in a time of post-war economic prosperity, so they chose to enjoy life instead of going straight to work (5)

○ Baby Boomers do not have a special notable work ethic compared to other generations (7)

According to research, what most influenced Millennials opposition to traditional workplace career ladders?

○ Technology that provided access to information that was previously gleaned through time spent in the workforce (1)

○ Their natural sense of entitlement instilled in them by their parents (2)

○ Their level of education (3)

○ Their Generation X parents who taught them they could have what they wanted (4)

End of Block: Understanding

Start of Block: Applying

The questions that follow relate to some best practices in applying factual information about each generation and the reasoning behind them toward making organizational changes that will appeal to different generations and assist in turning generational conflict into potential opportunities.

According to research, what is the one workplace expectation that is most common across all generations?

○ Good Pay (1)

○ Flexibility (2)

○ Autonomy (3)

○ Career Advancement Opportunities (5)

According to research, which office-space change would do the **least** in meeting the workplace preferences of Gen Z?

○ More private office spaces (1)

○ More open workspaces, adaptable for both group and private work (2)

○ More locations to meet with a supervisor face to face, outside of an office (3)

○ None of the above, all of these changes would appeal to most of Gen Z (4)

According to research, what established practice is being challenged as younger generations enter the workforce?

○ Traditional career ladders (1)

○ Speed to promotion (2)

○ More senior level=older (4)

○ All of the above (5)

According to research, which generation(s) is/are notably hard to retain without opportunities for promotion and/or increased pay?

○ Baby Boomers and Gen X (1)

○ Gen X and Millennials (2)

○ Gen X, Millennials, and Gen Z (4)

○ Baby Boomers and Gen Z (5)

According to research, of those listed, what is the best approach to addressing generational diversity in the workplace?

○ Finding opportunities to emphasize similarities between generations, and act accordingly, particularly when it comes to communication, work-life balance, and feedback (1)

○ Treat every generation of staff the same regardless of their generational identity, any other approach is risky and could produce HR issues (2)

○ Create different policies for each group of staff according to their generational identity, this flexibility is important (3)

○ Do not address it proactively, that could make things worse, but if an issue seems to be generational, consider how generational knowledge could be used to address it (4)

End of Block: Applying

Start of Block: Block 5

(Optional) Please provide your full name and your email address, if you are interested in knowing your individual results for both the pre- and post-assessments, at the conclusion of this study. As mentioned, aggregate results will be provided to all who participate.

First and Last Name

_____

Email Address

_____

End of Block: Block 5

OAFA Managerial Training Assessment

Start of Block: Introduction

Thank you for agreeing to participate in my study. As a refresher, for my Dissertation in Practice, I am studying the how to support managers in successfully navigating the challenges of managing a multigenerational workforce. The hope is that manager development in this area will help reduce conflict caused by generational diversity in the workforce and, further, assist us in taking advantage of the benefits of this diversity for our organization. Please note, that it is important to be as honest as possible in your perception of your own competencies, and to answer all questions to the best of your ability, in order to be able to evaluate the benefit gained (or lack thereof) of the training intervention that will follow this initial assessment which should take no more than 15 minutes to complete. In support of a goal of full transparency, you can submit your responses anonymously, should you so choose. **At the end of the survey, you will be assigned an ID through Qualtrics that will allow me to compare your responses from the initial assessment to the one following completion of the training modules. You will need this number for the post assessment, so please take note of it.** You will also have the option of providing your name and email if you would like to be sent your results, both before and after the implementation of the intervention. If you have read any of this and no longer wish to participate, please feel free to exit at this time, and know your time was still appreciated. For those moving forward, thank you once again for your time and commitment to this effort!

Which generation are you a member of?

○ Baby Boomer (Born 1946-1964) (1)

○ Gen X (Born 1965-1980) (2)

○ Gen Y (Millennial) (Born 1981-1996) (3)

○ Gen Z (Born 1997 or later) (4)

How long have you supervised staff? (this question refers to supervision in any capacity, not just within this office, or your current role)

○ Less than 5 years (3)

○ More than 5 years and less than 10 years (4)

○ More than 10 years and less than 15 years (5)

○ 15 years or more (6)

Do you currently, or have you previously supervised, more than one generation of staff, at the same   time?

○ Yes (17)

○ No (19)

○ Unsure (18)

Which generations of staff do you currently manage (please select all that apply)?

☐ Baby Boomer (18)

☐ Gen X (19)

☐ Gen Y (Millennials) (20)

☐ Gen Z (21)

☐ I do not currently supervise staff (23)

Where do you currently work?

○ Pitt- Office of Admissions and Financial Aid (1)

○ Pitt-Regional Campus (2)

End of Block: Introduction

Start of Block: Self-Evaluation

Please evaluate your perceived self-competency in each of the following five areas. Remember these responses can remain anonymous.

I know how to alter my management style toward the preferences of my staff

    ○ Strongly agree (23)

    ○ Somewhat agree (24)

    ○ Neither agree nor disagree (25)

    ○ Somewhat disagree (26)

    ○ Strongly disagree (27)

I understand the workplace preferences of each of the generations represented in my workplace

    ○ Strongly agree (13)

    ○ Somewhat agree (14)

    ○ Neither agree nor disagree (15)

    ○ Somewhat disagree (16)

    ○ Strongly disagree (17)

    I feel confident in my ability to manage multiple generations of staff, simultaneously

    ○ Strongly agree (20)

    ○ Somewhat agree (21)

    ○ Neither agree nor disagree (22)

    ○ Somewhat disagree (23)

    ○ Strongly disagree (24)

I am able to successfully diffuse conflict between staff of different generations

◯ Strongly agree (13)

◯ Somewhat agree (14)

◯ Neither agree nor disagree (15)

◯ Somewhat disagree (16)

◯ Strongly disagree (17)

I know how to utilize the unique strengths of different generations to create opportunities within my team

◯ Strongly agree (11)

◯ Somewhat agree (12)

◯ Neither agree nor disagree (13)

◯ Somewhat disagree (14)

◯ Strongly disagree (15)

End of Block: Self-Evaluation

Start of Block: Remembering

The questions that follow relate to the most commonly identified workplace characteristics of the four generations of staff currently in the workforce. While generational preferences are a debated topic, and not every member of each generation will share the same characteristics, "Correct" answers are based are research findings on multigenerational workplace preferences. Do your best to select answers based on what you know objectively over what you believe to be true based on observation.

According to research, which statement most accurately describes Baby Boomers in the workplace...

○ Baby Boomers are loyal, competitive, hard workers, who value clear hierarchy and expect to have their opinions heard and valued regardless of their title (1)

○ Baby Boomers are committed workers with strong work ethic, who value efficiency, emerging technologies, and are open to change (2)

○ Baby Boomers are independent, competitive, loyal, leaders who expect professional development at every work stage (3)

○ Baby Boomers are hardworking, team-oriented and mistrusting of organizations, they are practical rule followers who appreciate authoritarian leadership (4)

According to research, which statement most accurately describes Generation X in the workplace...

○ Generation Xers are optimistic, hard workers, who expect efficiency and value collaboration (1)

○ Generation Xers expect efficiency, work-life balance, and flexibility, they are pragmatic, skeptical, and entrepreneurial (2)

○ Generation Xers are noted multi-taskers, who feel work-life balance is critical, they are independent problem solvers who feel it is more efficient to get work done themselves (3)

○ Generation Xers are we-centric, they are practical, they respect authority and traditional hierarchy, and are notably optimistic (4)

According to research, which statement most accurately describes Millennials in the workplace...

○ Millennials are team-oriented, multi-taskers, they are comfortable with traditional hierarchies but expect to have their opinions valued regardless of their level in the organization (1)

○ Millennials are independent problem solvers and efficient multitaskers with a strong grasp of technology, they prefer autonomy but are comfortable working with groups (2)

○ Millennials are collaborative workers who desire flexibility, balance, feedback and recognition, their grasp of technology has made them outstanding multitaskers (3)

○ Millennials are we-centric workers, who respect authority, and desire flexibility, they are optimistic and will be loyal to an employer who is loyal to them (4)

According to research, which statement most accurately describes Gen Zers in the workplace...

○ Generation Zers are independent workers would choose purpose over high pay, they are web-centric and expect diversity, flexibility, and efficiency in the workplace. (1)

○ Gen Zers are collaborative workers, however, prefer to do so electronically, they desire to make a difference, and expect to work 9 to 5 hours with time after work reserved for their passions (2)

○ Gen Zers are uncomfortable with traditional hierarchies, and expect their opinions to be valued despite being new to the workforce, they have a practical perspective that work is primarily about pay (3)

○ Gen Zers value constant connectedness, they prefer to communicate via technology, and they are very optimistic (4)

According to research, from the Baby Boomer generation and beyond, what has had the greatest impact on creating differences across generations?

○ The Economy (1)

○ Climate Change (2)

○ Politics (3)

○ Technology (4)

According to research, what three things do all generations seem to desire to some extent in the workplace?

○ Flexibility, Feedback, Acknowledgement (1)

○ High Pay, Promotional Opportunities, Independence (2)

○ Collaboration, High Pay, Flexibility (3)

○ In-person communication, Acknowledgement, High pay (4)

End of Block: Remembering

Start of Block: Understanding

The following questions relate to the historical events that are have said to determine the behaviors and expectations of each generation. Developing a better understanding of what motivates their

preferences can help in appreciating the similarities and differences between multiple generations in the workplace and applying this knowledge to reduce conflict and create opportunities afforded by diversity.

According to research, which major event and/or common occurrence did not play a role in Gen X's view of the workplace?

☐ Era of corporate downsizing (1)

☐ Era of increased divorce rate (2)

☐ Era of slowed technological growth (3)

☐ Era of global competition for jobs (5)

Which of the following statements about Gen Z is incorrect?

○ Gen Z both values and expects facetime with their supervisors, they feel this is necessary for building real relationships to get their opinions heard (1)

○ Gen Z is accustomed to personal relationships happening via text and social media so at work they prefer to work collaboratively in the workplace, as it helps them to be more productive (2)

○ Gen Z would make a decision whether or not to work for a company based on their apparent grasp of technology, their diversity, and their commitment to social responsibility (3)

○ Gen Z would appreciate the opportunity to craft their own job descriptions and likes the idea of working multiple roles in the same workplace (4)

According to research, which generation is most likely to emphasize visual connections at work and want to set up meetings?

○ Baby Boomers, they grew up in the broadcast era where they learned to emphasize the visual and the value of a good presentation (1)

○ Gen X, they had new technologies of email and cellular phones and really missed the reduced opportunities for face-to-face communication (2)

○ Millennials, they grew up with rapid technology, what better way to connect instantly than connect in person (3)

○ Gen Z, the internet lets them collaborate on everything, they want this in the workforce (4)

According to research, which two events seemed to play the largest role in producing Baby Boomers' most common workplace characteristics?

○ Population boom and introduction of television (3)

○ Economic decline and global competition (4)

○ Corporate downsizing and population boom (5)

○ High divorce rate and decline of the radio (7)

According to research, what **most** influenced Millennials opposition to traditional workplace career ladders?

○ Technology that provided access to information that was previously gleaned only through time spent in the workforce (1)

○ The natural sense of entitlement instilled in them by their parents (2)

○ Their level of education (3)

○ Their Generation X parents who taught them they could have what they wanted (4)

Generally speaking, members of the same generational cohort share the same....

○ Historical context (1)

○ Social context (2)

○ Chronological context (3)

○ All of the above (4)

End of Block: Understanding

Start of Block: Applying

The questions that follow relate to some best practices in applying factual information about each generation and the reasoning behind them toward making organizational changes that will appeal to different generations and assist in turning generational conflict into potential opportunities.

According to research, which workplace change would appeal to the most generations of staff, simultaneously?

○ Increased pay (1)

○ More flexibility in hours (2)

○ More promotional opportunities (3)

○ More opportunities to do impactful work (5)

According to research, which is the primary cause of generational conflict?

○ Managers making no effort to adapt as the workforce changes (1)

○ Treating all generations, the same (2)

○ Communication challenges across generations (3)

○ Too many different workforce preferences (4)

According to research, workplaces must be prepared to adapt as which traditional feature of the workplace is being challenged?

    ○ Traditional career ladders (1)

    ○ Speed to promotion for both younger and older staff (2)

    ○ More senior level=older (4)

    ○ All of the above (5)

According to research, which generation(s) is/are notably hard to retain without opportunities for promotion and/or increased pay?

    ○ Baby Boomers and Gen X (1)

    ○ Gen X and Millennials (2)

    ○ Gen X, Millennials, and Gen Z (4)

    ○ Baby Boomers and Gen Z (5)

Which of the following is NOT one of Shaw's "Five Steps for Leading Through Generational Differences"?

    ○ Flex: Agree on how to accommodate different approaches/preferences (1)

    ○ Address: Find ways to reduce conflict by locating generational similarities (2)

    ○ Resolve: Determine which option will yield the best results (3)

    ○ Leverage: Maximize the strengths of each generation (4)

Which of the following is **not** something the tactic "Create Once Publish Everywhere" seeks to accommodate for?

    ○ Different generations (1)

    ○ Different learning preferences (2)

    ○ Different schedules (3)

    ○ Different interpretations of information (4)

End of Block: Applying

Start of Block: Block 5

(Optional) Please provide your full name and your email address, if you are interested in knowing your individual results for both the pre- and post-assessments, at the conclusion of this study. As mentioned, aggregate results will be provided to all who participate.

First and Last Name

_____

Email Address

_____

Here is your Random ID ${e://Field/Random%20ID} Once you have recorded this number, please press the arrow to submit your survey. This number will also be emailed to you as an untitled message from "Qualtrics Survey Software" within minutes of submission. You will need this number to complete the post-assessment.

End of Block: Block 5

Appendix H Post Intervention Survey

Managerial Training Feedback Survey

Start of Block: Default Question Block

Thank you for taking the time to participate in both the assessments and the training modules for my study. This survey will allow me, the researcher, to get a more complete picture of the studies' impact, along with areas for improvement. To encourage honest and candid responses, this survey is anonymous, and no comments will be personally identifiable to their author. Please proceed as you feel comfortable, no questions are required.

Do you feel that participating in the Generational True and False activity has helped (or will help) improve your ability to effectively manage multiple generations of staff?

○ Definitely yes (1)

○ Probably yes (2)

○ Might or might not (3)

○ Probably not (4)

○ Definitely not (5)

Please explain your answer (i.e., what stood out, what will you use, what was missing)

_____

Do you feel the Generational Role-Playing has helped (or will help) improve your ability to effectively manage multiple generations of staff?

○ Definitely yes (1)

○ Probably yes (2)

○ Might or might not (3)

○ Probably not (4)

○ Definitely not (5)

Please explain your answer i.e., what stood out, what will you use, what was missing)

_____

Do you feel the general review of the generational characteristics and their social and historical context has or will improve your ability to effectively manage multiple generations of staff?

○ Definitely yes (1)

○ Probably yes (2)

○ Might or might not (3)

○ Probably not (4)

○ Definitely not (5)

Please explain your answer (i.e., what stood out, what will you use, what was missing)

_____

Overall, do you feel the combined elements of the training had an impact on your ability to effectively manage multiple generations of staff, now or in the future?

○ Definitely yes (1)

○ Probably yes (2)

○ Might or might not (3)

○ Probably not (4)

○ Definitely not (5)

What element(s) of the trainings, if any, did you find most effective? (please select all that apply)

☐ The Facilitation (style, delivery) (1)

☐ The Frequency (twice) (2)

☐ The Group Work (3)

☐ The Reference Guide (4)

☐ Learning New Information (5)

☐ The Length of Time (1 hour each, 2 hours total) (6)

☐ The PowerPoint Presentations (9)

☐ None, I Did Not Feel the Training was Effective (7)

☐ Other (8) _____

What element(s) of the trainings, if any, did you find least effective? (please select all that apply)

☐ The Facilitation (style, delivery) (1)

☐ The Frequency (twice) (2)

☐ The Group Work (3)

☐ The Reference Guide (4)

☐ Learning New Information (5)

☐ The Length of Time (1 hour) (6)

☐ The PowerPoint Presentations (9)

☐ None, I Felt Every Element of the Training was Effective (7)

☐ Other (8) _____

Is there any other feedback, positive or negative, that you'd like to provide about the training, or its impact on your ability to manage a multigenerational staff?

_____

Please provide your email address if you are willing to be contacted for additional feedback (if you'd like to remain anonymous, please feel free to reach out to me at lauren.wright@pitt.edu)

_____

End of Block: Default Question Block

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