ABSTRACT

Onboarding Effects on Employee Engagement and Retention:
A Mixed Methods Study Exploring Extending Onboarding
and Its Impact on Long-Term Employee Engagement and Retention

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This problem of practice study explored extending onboarding of new employees to increase their engagement and retention. There is a tremendous need to decrease turnover in organizations because of the high financial and productivity costs to businesses. Replacing one employee costs 90–200% of the employee's annual salary (Allen, 2008; Cascio, 2006). This study examined the correlation between extending onboarding and its long-term effects on engagement and retention.

The Institute for Corporate Productivity (i4CP) states that organizations which create an emotional connection with employees early in the process are likely to have higher levels of engagement and retention. Ultimately, this connection impacts productivity and new employees reach production efficiency at a faster rate (Martin, 2018). The New Employee Recruitment and Development (NERD) Program prepares employees for success by providing the best tools, knowledge, and resources to ensure a successful transition from school to work. NERDs engage in a facilitated transition from school to work by engaging in various activities that includes training, as well as

receiving 1:1 life coaching. Additionally, NERDs have direct access to Senior Leaders that will empower them to become the creators and innovators of tomorrow.

The primary audience for this research is stakeholders impacted by employee engagement and retention. These stakeholders include any leaders with an interest in retaining their best employees and having them engage in effective work. This problem of practice study centers on the premise that if the NERD program demonstrates that longer onboarding periods are more impactful on engagement and retention, it can influence the ability to recruit, develop, and retain top talent. Other organizations can adopt this model adjusting to their organizational competencies and ensure employees create connectedness with their teams and job and bring their best selves to work.

This mixed methods study examined extending onboarding and its effects on engagement and retention. Quantitative findings demonstrate engagement was slightly lower for NERDs. Additionally, retention showed a statistically significant relationship between extending onboarding and retention. Qualitative data revealed engagement and retention themes from the NERDs point of view. These themes centered around the facilitation of learning and building community.

Key Words: Onboarding, engagement, turnover, employee turnover, retention, employee retention, employee onboarding, organizational development, employee engagement, talent retention, talent management, war on talent, extending onboarding, organizational change

Onboarding Effects on Employee Engagement and Retention
A Mixed Methods Study Exploring Extending Onboarding
and Its Impact on Long-Term Engagement and Retention

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DEDICATION

To my husband Mark and my son Mason who have been a constant source of support and encouragement during the challenges of my doctoral program and life. You two are my rocks! I am truly grateful for having you in my life. Your unconditional love for me keeps me going and inspires me each day to be a better person. Love and service are our code. Additionally, to my parents who always believed in me to reach my full potential. Your example set me on the right path with education. Thank you for always loving and believing in me.

CHAPTER ONE

Introduction to the Problem of Practice

Introduction

Recruiting, hiring, and retaining top talent is a strategic driver for organizations. To remain competitive in the war on talent, tech companies must have innovative solutions to retain talent. A survey conducted by i4CP discovered a direct correlation between effective onboarding and increased engagement, retention, and productivity (Martin, 2018). Employee engagement has a distinct impact on employee retention (MacIntosh & Doherty, 2010). Happy employees stay with an organization. Take care of the people and results will come.

This study focuses on turnover in the Information Technology (IT) sector as employee turnover is highest within the IT Industry. In 2017, IT had the highest turnover rate for any job sector at 13.2% (Booz, 2018). Specifically, software engineers had a 21.7% turnover rate (Forrest, 2018). Average tenure continues falling within the IT industry. In 2013 the average tenure in IT was three years; in 2017 it dropped to two years. Despite efforts to engage and retain software engineers, the turnover phenomenon usually occurs at the eighteen-month mark. Figure 1.1 (Average turnover in years for top technology companies) demonstrates the average turnover at the top companies in tech compared to the Sample Company for 2017 (Booz, 2018).

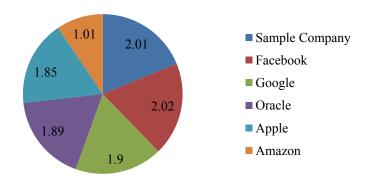


Figure 1.1. Average turnover in years for top technology companies.

Organizations need to administer onboarding as a strategic driver to increase their engagement and retention. Highly engaged employees put forth more discretionary effort based on their emotional connection to their organization. Engagement starts with the onboarding process that helps the new employee understand the company and their role. Employees who feel higher levels of engagement have higher levels of stay intention. Corporate human resource departments define stay intention as an employee's intention to stay with the current organization for the long term. Stay intention links directly to retention.

Many factors influence an employee's intention to stay with an organization. Primary elements include the employee experience in their onboarding phase and their level of engagement in the organization. These elements blend with other factors such as generational differences in the workplace to determine an employee's retention with the company. Effective onboarding can immediately impact an employee's engagement. Throughout the employee lifecycle other elements such as development opportunities, engaging in meaningful work, and career progression can also influence engagement.

Taking these factors into consideration, this study will examine how extending onboarding can impact engagement and retention.

Statement of Problem

Employees leave an organization for a variety of reasons, with poor onboarding being a primary driver. When conducting exit interviews, most employees state they leave within the first two years because of poor onboarding, lack of training, and lack of opportunities. These three elements create a psychological contract between the employee and the organization. A psychological contract includes the mutual expectations between an organization and its employees (Devlin, 2021). Onboarding assimilates new employees into the organization (Caldwell & Peters, 2018).

Organizations that have robust onboarding programs increase performance, engagement, and retention (Grillo & Kim, 2015). Conversely, ineffective onboarding hinders engagement and productivity (Nintex, 2018). Research shows that most conventional organizational onboarding programs provide new employees with a plethora of information that does not help them assimilate to the organization but rather overwhelms them (Caldwell & Peters, 2018).

Most organizations do not have a formal onboarding process. This lack of onboarding has immediate implications for employee engagement and retention. Only 32% of organizations have a formalized onboarding process (Gillespie Associates, 2016). The critical assimilation period occurs within the first 12–18 months (Grillo & Kim, 2015). Employees who engage in a structured onboarding process are 20% more engaged than those who do not. Additionally, 70% of new employees make a stay decision within

their first six months based on their level of emotional connectedness with an organization (Gillespie Associates, 2016).

Effective onboarding leads to increased individual productivity that ultimately affects an organization's bottom line. Specifically, effective onboarding can increase employee performance by up to 11% (Allen, 2008). Many employees experience an informal or formal onboarding process. Informal onboarding is the process in which an employee learns their role without a structured program in place. Formal onboarding includes a structured onboarding process that indoctrinates the employee into the company culture as well as sets the expectations for the competencies of their role. Those who experience a formal process have higher levels of engagement, organizational connectedness, performance levels, and decreased turnover (Bauer, 2010). Employees that demonstrate higher levels of productivity have better alignment with organizational goals and objectives, which ultimately leads to lower turnover rates (Brown, 2020).

Onboarding sets the stage for the employee journey. When employees experience great onboarding, their levels of engagement are higher. However, when new employees engage in an ineffective experience, or no onboarding experience their levels of engagement are much lower. Employee engagement is connectedness with an organization that allows the employee to bring their whole self to work each day (Cooper-Thomas et al., 2018). When employees experience this bond, they become better performers and put forth a higher level of discretionary effort (Gallup, 2007). As a result of increased engagement, organizations experience higher levels of productivity and ultimately retention.

Research shows a direct link between effective onboarding and increased retention. Retention is the act of keeping an employee with an organization. Employers can conduct stay interviews to keep in touch with what employees are thinking and feeling (Heathfield, 2019). Stay interviews are conversations to uncover items that are causing the employee to disengage, and what can be done to create a solution for these issues. The focus of stay interviews is to ensure the employee knows they are valued and keep them engaged. Organizations must engage their employees to keep them from leaving. Retention helps achieve team and organizational results (Lambert et al., 2001). A symbiotic alignment exists between onboarding, engagement, and retention. A good onboarding experience sets employees up for success. Creating a psychological contract with an employee through well-defined expectations and role clarity can help increase their engagement and their stay intention. When an employee experiences high performance and success their likelihood of staying with an organization dramatically increases (Bigham, 2019). However, with most organizations, conducting effective onboarding is not the case.

Many employees experience a difficult transition from school to work in their first job. When a new employee's onboarding experience is not stellar, it can set them up for disengagement and ultimately failure. In this study, a pseudonym provides anonymity to the study organization. Sample Company's Technology Services division sought to keep the best and brightest as they were suffering from high rates of turnover. In 2017, an idea emerged to recruit new Associate Software Engineers and help them transition from school to work. The NERD program (New Employee Recruitment and Development) prepares future leaders by providing the best tools, knowledge, and resources to ensure

success. Additionally, it gives NERDs direct access to Senior Leaders that will empower them to become creators and innovators of tomorrow. The nine-month NERD program not only helps support the transition from school to work, but also equips the NERDS with knowledge and skills to make them innovative and successful technologists. This study is significant for all organizations to determine the correlation between longer onboarding periods and their impact on engagement and retention using the NERD program as the guide. Ultimately longer onboarding can greatly impact overall profitability for all types of organizations.

Purpose of the Study

An i4CP poll stated that when an employee experiences an effective onboarding program it will create an emotional bond. Furthermore, this emotional bond drives the employee to achieve job proficiency more quickly than if they did not experience effective onboarding. (2018). In a 2007 study conducted by the Wynhurst Group, 58% of employees were more likely to remain with a company at the three-year mark when they engaged in a structured onboarding process (Allen, 2008). This mixed—methods study explores the relationship between onboarding and employee engagement and retention for NERDs using a stratified purposeful sampling type. To fully engage the NERDs and ensure the study obtains data that supports the main research focus, two hypotheses, a primary research question and two sub-questions, and a mixed methods question guide the inquiry.

Hypothesis One: The average engagement scores of NERDs will be higher than non-NERDs by year.

Hypothesis Two: There is a statistically significant difference in retention between NERDs and non-NERDs by year.

Primary Research Question: How do onboarding efforts impact engagement and retention?

Sub-question One: What do NERDs say about the program that kept them most engaged?

Sub-question Two: What influences employees to stay?

Mixed Methods Question: To what extent does extending onboarding impact engagement and retention of NERDs?

Theoretical Framework

Organizational development theory and Kotter's eight-step organizational change model combine to form the conceptual framework of this study. Organizational development theory increases the knowledge, skills, and abilities of employees within an organization to increase performance and move more readily through change. This theory helps individuals understand the change that is external to them and manage change through transition management, which is their internal mechanism to cope with the change (Austin & Bartunek, 2003). Within organizational development theory, there are two main elements: implementation and change. Implementation focuses on the plan and process to implement the change in an organization. Change will focus on the people aspect of change and include activities such as communication and training to solidify the change. John Kotter's eight-step organizational change model concentrates on the steps to move organizations through change and transition to adopt innovation (Armenakis, 1999). Integrating both models into this study will drive the focus on individual and organizational adaptation to change.

Organizational development (OD) is the process of continuous improvement for an organization. OD begins with examining gaps within an organization, then creating change action plans to address the gaps. Within this process, OD guides the implementation and evaluation of the organizational change plans. At the center of the organizational change plan are employees that must be an intricate part of the change. OD enhances employee's knowledge, skills, and abilities to improve organizational performance and manage future change (Farias & Johnson, 2000). Onboarding is a critical part of organizational development as it serves as the conduit for new employees to engage in organizational assimilation. Participating in effective onboarding increases employees' sense of self-efficacy (Bauer & Erdogan, 2011). Additionally, Kotter's change model influences organizational change.

Dr. Kotter created his eight-step change model after he dedicated time observing leaders and organizations executing their strategies. This work led to the book *Leading* Change (2012). Within this book, Kotter laid out eight steps to organizational change. Step one is creating a sense of urgency where change is presented as a solution to an issue. Step two is forming a powerful coalition where stakeholders will back the change. Step three is creating a vision for change, performing processes differently and more effectively. Step four is communicating the vision. Sharing the vision with the organization is key so all the employees become emotional stakeholders. Step five is removing obstacles. Obstacles can be people or processes; both must move to the new side of the change. Step six is creating short-term wins. Short-term wins are great motivators for those involved in the project and help to remove obstacles. Step seven is building on the change. Organizations should celebrate all wins and create and stretch goals to continue building the change. Finally, step eight is anchoring the change into the culture. Embedding the change into the culture influences the future of the organization (Kotter, 2012). Kotter cites when an organization's strategy is mismatched with the

culture, the organization will struggle. A vital competency for change management is assisting employees to understand the organizational strategy and culture. Onboarding is a key element to set the foundational understanding of strategy and culture. The onboarding phase is the point that employees acclimate to the organization's culture and encourage others to adopt it by modeling the behaviors outside of orientation back on the job (Harpelund et al., 2019).

This study applies organizational development and Kotter's eight-step organizational change model to explore extending onboarding and its long-term effects on engagement and retention. As new employees begin a role with an organization, they experience change. The organization also experiences change when they integrate a new team member into a role. Organizational development theory and Kotter's eight-step organizational change model connect with engagement and retention by balancing the change that occurs to the organization and the employee's transition experience.

Research Design and Methods

The research design methodology used in this study is convergent mixed methods. Mixed methods were selected for this study to combine qualitative and quantitative research components to answer the research questions. Specifically, in convergent mixed methods quantitative and qualitative data are collected and analyzed concurrently, then merged to interpret results (Creswell & Plano-Clark, 2011). The research site was at the pseudonym Sample Company and the Managing Director granted permission. Research participants included those participating in the NERD program and those not participating in the NERD program.

Data collection consisted of several sources. Quantitative data included engagement scores, retention metrics, and end of program questionnaire satisfaction data. Engagement data resides in the NEXUS system for the organization that deploys, tabulates, and analyzes the annual employee engagement survey for NERDs and non-NERDs. The Human Resource Information System (HRIS) system contains the retention data for NERDs and non-NERDs. End of program questionnaire data exists in Survey Monkey evaluation software. Only the NERD population received the end of program questionnaire. Qualitative data comprised interviews, focus groups, and open-ended inquiries at the end of program questionnaires. Each NERD participated in interviews, focus groups, and end of program questionnaires. The convergent mixed methods approach merged quantitative and qualitative data to answer the hypotheses and research questions.

Definition of Key Terms

Convergent Mixed Methods: Design in mixed methods research that merges quantitative and qualitative data that is collected and analyzed simultaneously (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018).

Employee Lifecycle: The lifespan of an employee within an organization that includes forecasting and finding talent, onboarding new employees, managing and developing employees, transitioning if applicable by promoting or exiting from an organization (Booz et al., 2008).

Engagement: An emotional tie an employee has to the organization (Kruse, 2012).

Connectedness with an organization that allows the employee to bring their whole self to work each day (Cooper-Thomas et al., 2018). Creating a link between

emotions, the work itself and the people within the organization that impacts employee performance (Eldor & Vigoda-Gadot, 2017).

Involuntary Turnover: Turnover initiated by the organization (Allen, 2008).

- John Kotter Change Model: Eight-step organizational change model concentrates on the steps to move organizations through change and transition to adopt innovation (Armenakis, 1999).
- Mixed Methods: Blending of quantitative and qualitative data into a comprehensive study where one data set compliments and explains the other data set (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018).
- Onboarding: In order for employees to become productive members of an organization, onboarding enhances their current skill set, while upskilling to enhance their progression towards their new role (Maurer, 2015). Assimilating new employees into the organization (Caldwell & Peters, 2018). Integrating new employees into the organization to help them succeed by providing the right knowledge, tools, and resources. This process can run the span of the employees' first year (Booz et al., 2008).
- Orientation: A transactional approach to bringing on new employees that contains paperwork and general information. This orientation is generally done in less than a week and is a one-time event (Booz et al., 2008).
- Organizational Development: Increasing the knowledge, skills, and abilities of employees within an organization to increase performance and move more readily through change (Austin & Bartunek, 2003).

Pragmatism Worldview: Focus of this worldview is on the consequences of actions based

- on practical rather than theoretical considerations (Creswell & Plano-Clark, 2018).
- Qualitative Research: Research that asks research questions and uses descriptive text to understand problems with individuals and/or groups (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018).
- Quantitative Research: Research that tests theories for relationships using statistical procedures (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018).
- Retention: The goal of keeping employees within the organization (Bearden et al., 2019).
- Stay Intention: Employees intention to stay with an organization on a long-term basis (Mustapha et al., 2010).
- Stay Interview: An interview to uncover employee's personal motivation factors and manage to those motivations (Iliev & Stoyanova, 2017).
- *Talent Retention:* The goal of keeping employees within the organization (Bearden et al., 2019).
- *Turnover:* Percentage of employees who terminate their employment, including voluntary and involuntary turnover (Sears, 2017).
- Voluntary Turnover: Turnover initiated by the employee (Allen, 2008).
- *War on Talent:* In times when there are more jobs than talent, organizations compete for employees (Keller & Meaney, 2017).

Conclusion

Onboarding supports new employee socialization within the organization. The onboarding process helps the new employees gain perspective of their role and how they fit within the organization. When employees feel a connection with their organization, they become more engaged. Over time, this high level of engagement translates into

retention. Research shows that those with high embeddedness within an organization are 48% less likely to leave (Ma et al., 2018). Organizations that demonstrate high levels of employee engagement and retention show stronger financial and productivity gains. This study examined the concept of extending onboarding and its effects on overall employee engagement and retention. Onboarding has received much attention over the last decade as a strategic driver of engagement and retention. To understand this research, it is important to know the key elements that impact onboarding. Within the literature review, this study examines the employee lifecycle, onboarding, engagement, retention, and generational differences in the process. Each of these elements will focus on their importance, best practices, and how each element ultimately affects the bottom line of the organization.

CHAPTER TWO

Literature Review

Portions of this chapter have been previously published in modified form in Walker-Schmidt, W. (2021). Leader effect on engagement. In L. Carvalho, N. M. Teixeira, & P. Pardal (Eds.) Interdisciplinary and practical approaches to managerial education and training. IGI Global.

Introduction

This study argues that effective onboarding practices have a direct impact on engagement and retention. The literature is replete with studies that show onboarding is a vital element to creating a connection with the employee and the organization. This study examines the argument with five elements to support the claim: elements of the employee lifecycle, onboarding, engagement, retention, and generational differences in the process. The first element of the employee lifecycle explains where onboarding, engagement, and retention fall within an employee's time with an organization and the benefits of each step. Second, this paper examines onboarding and why it is a vital element to engagement and retention by creating an emotional connection with the organization. When employees experience effective onboarding, there is a direct correlation between engagement and retention. Third, this paper investigates engagement and its importance to the employee experience. Engagement shows the amount of discretionary effort an employee places on their role in the organization. Key levers that influence engagement include personal growth, leadership support, communication, and corporate engagement initiatives. Fourth, this paper analyzes elements of retention and its impact on

engagement. Providing meaningful work, creating a positive environment and individual connectedness directly impacts the retention of employees. Finally, generational differences in the workplace are vital for human resource departments to understand to impact engagement and retention through personalized experiences.

This study explains that extending onboarding (using the NERD program as our source) will help organizations to engage and retain their new employees past the normal drop—off point of eighteen months. Furthermore, it outlines the strategies used during this nine-month time frame that NERD participants felt were most beneficial and kept them engaged. The significance of this study centers around the predicted conclusion that those who engage in longer onboarding have higher levels of engagement and retention. The anticipated outcome is to publish this research for other organizations to extend their onboarding programs to impact their employee engagement and retention.

Employee Lifecycle

The employee lifecycle encompasses all the tools, training, policies, and procedures that support an employee's total experience with an organization. An employee lifecycle contains seven steps: outreach, recruitment, pre-boarding, onboarding, performance, training, and development, and off-boarding. When a candidate is searching for a position, they target certain job titles or even companies. From the company's perspective, they engage in outreach to these potential candidates. Outreach is the process of an organization advertising their brand and positions within their organization to talent in the marketplace. Within this step, the emotional connectedness begins with the candidate. The candidate's outreach perspective is contacting the company about the potential role.

Once there is a match between role and candidate, the recruitment process begins. This activity includes the interview and job offer process. Pre-boarding begins when the candidate accepts the offer from the organization. Within this stage, an emotional hook is engaged by the organization to ensure they do not lose the candidate to another organization before their first day of employment. Often setting the emotional hook entails sending company-branded gifts, setting up first-day logistic calls, and allowing the candidate time to ask any questions that will put them more at ease. Some companies even allow future employees to set up their benefits and conduct some of the pre-orientation paperwork before the employee's first day to make them more comfortable.

Upon arrival at the company on the first day, onboarding officially begins.

Onboarding topics include exposure to the policies and procedures of the organization, as well as learning the specifics of their role and how performance success is measured.

Performance is a metric that measures how an employee is fairing against a baseline and highlights any gaps. Measuring performance is an ongoing process that provides the employee with constant feedback which can be formal and informal. Annual evaluations and recognition programs are also a part of performance. Training and development are offered to all employees to help broaden their organizational and individual competency. Aligned with performance, training and development can help the employee reach their goals and become a high performing team member, impacting the company's outcomes. The last stage of the employee lifecycle is off-boarding. Off-boarding can occur when an employee enters a new role in the organization or completely leaves the organization (Lyons, 2019).

Managing the employee life cycle is vital to all organizations. Employees make connections within each step of the employee lifecycle. When employees feel valued at each stage of the employee life cycle, they will have higher levels of engagement and retention (Lyons, 2019). Research shows that onboarding is a vital part of creating an employee connection with the organization. Starting a new job can produce high levels of anxiety. When roles are not clearly defined and the employee is uncertain about their duties it can hinder the employee's ability to connect with the organization (Bigham, 2019). Therefore, creating an onboarding experience that connects to an employee's emotions is an essential step.

Onboarding

Onboarding is a critical step in establishing a connection between the new employee and the organization. A 2018 report i4CP states that employees who experience an effective onboarding will have higher levels of connectedness with an organization and reach productivity more rapidly (Martin, 2018). Over time, effective onboarding leads to increased retention as employees are more likely to remain with a company at the three-year mark if they engaged in a structured onboarding process. Do companies pose important questions related to onboarding, such as: how long is appropriate to onboard? What length of time produces the best results? What are the right topics to cover? Many companies are searching for the solution, but there is no empirical evidence to support a definitive resolution.

Onboarding is a fundamental step in beginning the engagement and retention of a new employee (Krasman, 2015). Research shows that a comprehensive onboarding program leads to increased engagement, productivity, and overall retention (Snell, 2006).

During the recruitment phase, it is quite costly to capture talent. Recruiting costs can range from \$20,000–\$50,000 to bring in an Associate Software Engineer (SHRM, 2016). The first 45–60 days of employment are critical. Studies show that employees that do not receive thorough onboarding leave within this timeframe (Llarena, 2013). Organizations must focus time, energy, and effort on employees and the onboarding process to attract, develop, and retain top talent.

Effective onboarding can begin a positive association between an organization and employee by setting expectations for success. At every employee's core is a desire to succeed. Organizations can help or hinder this desire during the onboarding phase of their development. Bauer (2010) describes the goals of an onboarding process to help new employees establish relationships, improve performance, and reduce turnover. Within onboarding, Bauer (2010) defines four core elements: compliance, clarification, culture, and connection. Compliance is the action of teaching policies and procedures. Clarification is setting job-related expectations. Culture provides employees with the cultural norms of the organization. Connection is creating a network of relationships within the organization (p. 2). Building connections and relationships within an organization helps create a bond for employees that can increase job performance and satisfaction (Bauer & Erdogan, 2011). Thus, a psychological contract between an organization and a new employee begins to develop. When an employer establishes trust and treats employees as valued partners, employees will demonstrate higher levels of performance (Caldwell & Peters, 2018). Therefore, onboarding creates a successful partnership for both new employees and the organization.

Onboarding is one of the most important elements a human resource department performs because of the extreme impact on the overall organization. While many organizations place human capital as a top key initiative, few are looking at the core of why so many employees are leaving. Nintex (2018) conducted a multi-industry study of full-time employees and discovered that a third of them are currently looking for a new role (p. 2). One of the key reasons employees are seeking employment elsewhere is they felt the onboarding process is broken (Nintex, 2018b). Onboarding can shape not only the employee's experience but the reputation of the organization as well (Fica, 2018). When an organization gains a reputation as having high turnover it becomes seen as a revolving door for employees (Nintex, 2018a). Employees that enter the organization knowing this reputation view the current organization as a stop on their career path, not as a place to build their long-term career. This attitude can greatly affect the bottom line of an organization if employees are not giving extra discretionary effort towards their roles. Performance and effort are long-term outcomes of onboarding that can significantly affect time to productivity and customer satisfaction rates (Bauer, 2010). Bamboo HR survey results show that human resource departments estimate that over \$10,000 is wasted on ineffective onboarding efforts (Fica, 2018). With all these elements in play, it is clear to see why onboarding is such an important element for organizations to get right. However, there is much debate on what is "right."

Many resources discuss best practices; however, no organization has landed on the exact solution. Organizations attempt to integrate different forms of onboarding practices to affect engagement and retention. However, the common elements in the literature center around creating an emotional bond with the organization, aligning the new employee with business strategies, explaining how their role will impact the organization, understanding performance expectations, providing tools and resources that will impact success, and cultural integration.

Bauer and Erdogan describe the process of employees creating an emotional bond with a company as organizational socialization (2011). Organizational socialization is the process of moving from being an outsider to being an insider (Bauer & Erdogan, 2011). In this transition, establishing relationships is key. A survey conducted by the Society for Human Resource Management cited that organizations are starting to build relationships before a new employee's start date (Skrzypinski, 2011). The purpose of building this relationship early in the process is similar to reducing buyer's remorse. After an employee has accepted the offer, organizations begin creating emotional connectedness, so the employee does not experience buyer's remorse. Often when an employee begins a position, they immerse themselves in the learning space. This can lead to not establishing relationships or developing a support system. This phenomenon can progress in creating social isolation and an extreme difficulty adjusting to the culture (Williams-Smith, 2017). Generally, when social isolation occurs the employee experiences a disconnect and is in jeopardy of exiting the organization. There must be a balance between the employee's day-to-day work and having a support system. Helping the employee understand their role and how they impact the organization also creates emotional connectedness.

Upon starting a new position, there can be some disconnect about role clarity.

Onboarding can provide the employee information about their role to help align the new employee with business strategies and explain how their role will impact the organization. Bauer (2015) condenses onboarding to 4 C's: clarification, compliance,

culture, and connection (p. 2). Clarification defines the details of an employee's role and how it connects to the larger picture (Bauer, 2015). In direct opposition to role clarity, is role ambiguity. Employees who experience ambiguity within their environment lose touch with the impact they can have on business strategies. They question how their role makes an impact and ambiguity begins to impact their performance. Employees that have role clarity experience the opposite effect. They have a greater understanding of their role and how it connects to the bigger picture (Hallak, 2016). Bauer cites how Google and Texas Instruments have onboarding programs that enable employees to seek information on their own and teach coping strategies to deal with new employee anxiety. As a result of instructing new employees in this manner, they adjust more quickly, become productive at a faster rate, and ultimately impact the organization's bottom line (Bauer, 2015). Furthermore, Bauer states (p. 5) that "measures of role clarity are among the most consistent predictors of job satisfaction and organizational commitment during the onboarding process" (Bauer, 2010). Within role clarity, employees also gain perspective on what tools and resources are available to them to help them be successful.

In conjunction with creating an emotional bond and setting clear job expectations, providing the right tools and resources to the new employee to ensure their success is key. Tools are the technical pieces for job accuracy and resources include personalized support through stakeholders and mentors. Prior to the employee entering the organization on day one, preparation must begin on what they need to be successful. One such tool for success is a written onboarding plan created by a cross-functional team. The onboarding plan should encompass all the tools (hardware, software, training-technical and soft skills) that the new employee will need in their role (Bauer, 2010). Stakeholders

are a vital part of the new employees' transition into the organization. They should not only be a part of the meetings to design the onboarding plan but be a part of the ongoing development for the new employee. The new employee should meet with all stakeholders in their first two weeks (Graybill et al., 2013). Stakeholders will serve a dual purpose as an influencer of the onboarding plan but also as an ongoing resource for the new employee throughout their tenure.

While tools are items that will help a new employee execute tasks, resources are a human element that provides mentoring and support. Stakeholders can provide ongoing support through coaching and creating networks for the new employee. They can serve as a role model and help the new hire maneuver through the corporate path. Mentors also serve in a capacity to provide coaching and support at the job-task level to scaffold the new employee's knowledge (Merriam & Bierema, 2014). Mentors are generally a job grade above the new employee such as a team lead. The mentor-mentee relationship creates a sense of psychological safety for the new employee to ask questions they might be hesitant to address with their leader (Bauer, 2010). Research shows that new employees with effective mentors have a stronger relationship to promotion and career satisfaction. Many new employees have multiple mentors throughout an organization. These mentors may or may not be in their direct business unit. Having multiple mentors increases the social networks the new employee builds. A community of mentors catapults the new employee into expanded opportunities throughout the organization (Dong et al., 2014). Mentorship focuses on social constructivism that enables people to work together to form new knowledge (Ormrod, 2020). New employees who have the

benefits of a mentor are more likely to integrate into the corporate culture more quickly than those without this support (Bauer, 2010).

Cultural integration is a key part of becoming a team member who transitions from new employee to high performing team member. In a survey conducted by Bamboo HR (p. 7), new employees who received culture integration training were twelve times more likely to feel emotionally committed to their organization (Fica, 2018). Entering a new organization is not always easy. External change has occurred, a new job begins. Transition is the internal mechanism to adjust to change. New employees who have a difficult time transitioning are not successful. Further research shows a strong relationship between internalizing the corporate culture and the new employee's long-term success (Saks et al., 2007). Effective employees connect to an organization's success.

Onboarding can have a direct impact on an organization's success. It can impact the bottom-line financial ledger positively or negatively. Employees who have an effective onboarding experience have higher levels of overall performance as a new employee is 87% less likely to leave the organization in the first twelve months (Gillespie Associates, 2016). Research shows that up to 20% of new hires resign within the first 45 days on the job (Leung, 2018). Replacing one employee costs 90–200% of the employee's annual salary (Allen, 2008; Cascio, 2006). The effects of no onboarding or poor onboarding can immediately affect employee morale, engagement, and performance. Poor onboarding leads to turnover within the organization. When the organization is spending money to repeatedly recruit, hire, and train employees who turnover within the first year, they are negatively impacting their bottom line. Instead of

spending those funds to constantly replace employees, why not redirect the investment to creating an effective onboarding program to keep the human capital?

Employee onboarding, when conducted effectively, is a proven facilitated transition into the organization. New employees and the organization alike will reap the benefits of effective onboarding. Onboarding is a key component in the engagement and retention of top talent. Human beings have a desire to succeed and form lasting relationships with others. Onboarding helps the new employee establish relationships and create emotional connectedness with the organization. While there is still much debate over how long onboarding should occur, human resource practitioners agree on the key elements that make onboarding effective. Employers must help new employees establish a bond with others in the organization such as stakeholders, mentors, leaders, and team members. Employers must align the employee with how their position will impact the organization through role clarity and understanding performance expectations. Tools and resources must be available for new employees such as tangible and intangible items to ensure success. New employees must feel like part of the organization and experience cultural integration to have long-term success. These elements used in tandem will help the new employee experience increased engagement and productivity. When the employee feels success and connection, overall retention for the organization increases, thereby impacting the bottom line. Effective onboarding must be a vital part of a new employee's experience to ensure a facilitated transition into the organization.

Employee Engagement

The literature is replete with studies linking employee engagement and retention.

Research conducted by Lambert and colleagues cites that high employee engagement

correlates with low employee turnover (Lambert et al., 2001). Turnover affects the bottom line of an organization and has drawn attention from the C-Suite. Conference Boards 2016 Survey of Global CEOs, a McKinsey study, cited attraction and retention of top talent as the number one issue (Keller & Meaney, 2017). Employee engagement is the cornerstone of the relationship between the organization and the employee. Many professionals in the corporate space use the terms engagement and satisfaction interchangeably, but they are not the same concept. Employee satisfaction is how content an employee is with the organization. Satisfaction is a part of engagement, but engagement encompasses much more. Engagement is how content an employee is with their position but also includes the level of commitment and discretionary effort employees place into their role. Discretionary effort is the level of effort that employees put forth going above and beyond their normal workload. This level of effort stems from an intrinsic motivation of what the employee finds enjoyable (Ormrod, 2020). Highly engaged employees regularly put forth higher levels of discretionary effort. However, most US employees are not within this space. Gallup cites that only 33% of US workers are highly engaged (Gallup, 2007). Employee engagement allows the employee to bring their whole selves to work in a trusting, supportive environment (Cooper-Thomas et al., 2018). When employees feel engaged in their workspace the individual employee and organization will experience success (Smith et al., 2016). Key levers that influence employee engagement are personal growth, leadership support, communication, and corporate engagement initiatives.

Employees who do not engage in personal growth opportunities at work are destined to leave. Each year on employee engagement surveys training and development

is one of the top items on the employee wish list. In a recent study of three million employees, the second most significant driver for employee engagement was a need for personal growth opportunities (Nelson, 2018). Development opportunities can be formal or informal. Formal programs consist of corporate training and development courses, while informal programs are ad hoc in nature such as mentoring, shadowing, or rotational assignments. Blending formal and informal methods are powerful development tools. Placing a team member on a specific project to increase their learning and skill capacity demonstrates an example of blending a formal and informal method (Cooper-Thomas et al., 2018). Alignment with each employee's needs for career progression through the creation of an individual development plan (IDP) is a powerful driver of engagement. Kia motors used their engagement scores in conjunction with the evaluation process to develop an IDP for each employee to ensure alignment with career progression (Tomlinson, 2010). By using a similar method, organizations can ensure that employees are motivated and contributing to the organization's bottom line (Iliev & Stoyanova, 2017). Employees and leaders should engage in a synergetic relationship between growth and development. Employees should verbalize where they want their career to go, and leaders should be their guide on the side. While leaders are not solely responsible for an employee's development, they will help in driving the process.

Leadership support is another key lever of employee engagement. Fullan (2011) states "the organization becomes effective because leaders are investing in employees, and this investment increases employees' individual and collective commitment to their work" (p. 50). Leaders impact employee engagement by focusing on how the team member wants to develop (Northouse, 2019). One of the many leadership responsibilities

is to help employees identify their targets for career satisfaction (Byham & Wellins, 2015). Leaders can accomplish career satisfaction through a variety of approaches. Research shows the most powerful methods are 1:1 meetings and stay interviews (Cooper-Thomas et al., 2018). During a 1:1 meeting, it is vital that leaders focus on goal setting, career-pathing, and providing feedback. Goal setting helps the employee align with corporate objectives. When an employee understands how their daily work impacts organizational achievement it is a powerful engagement driver (Smith et al., 2016). Career development should also be an intricate part of 1:1 meetings. When an employee has direction, their internal value will increase (Byham & Wellins, 2015). When employees do not have a clear vision about what their career path is they are more likely to disengage and leave (Iliev & Stoyanova, 2017). As the saying goes "people don't leave a job, they leave a leader." Leaders who provide genuine positive and developmental feedback have a more committed employee base. Employees have a need to do a good job and be successful, feedback is a key component. Feedback drives an employee's performance and development. Leaders who focus their feedback on behavior and performance instead of making it personal have a track record of better relationships with their employees and higher performing teams (Byham & Wellins, 2015). Leaders who are authentic in providing feedback directly impact employee engagement (Northouse, 2019). Combining 1:1 meetings with stay interviews is a powerful influence for engagement.

Stay interviews are a tactic to increase engagement and retention. Within these interviews' leaders uncover what motivates employees to stay and what could potentially make them leave. Additionally, leaders can uncover any blockers to the employees' long-

term success. Leaders have a responsibility to find out what the key motivations are for employees by asking them in meetings and then managing to those motivations (Byham & Wellins, 2015). Stay interviews create an emotional contract between the employee and leader. Employees who feel supported through leaders that understand their thoughts and feelings feel an emotional connectedness to the organization. Leaders that understand and adhere to this premise are far more likely to have employees who are highly engaged (Smith et al., 2016). Leaders who exhibit authentic leadership characteristics increase employee satisfaction and stay intention (Northouse, 2019). While leadership support is important, communication is also a crucial element of employee engagement.

Communication creates alignment for an employee and the organization.

Corporate and team communication are two key areas that influence engagement.

Employees want to know what is happening with their organization and expect their leaders to be transparent (Iliev & Stoyanova, 2017). When they have unanswered questions in their mind, they begin to create the storyline themselves. Consistent streams of corporate communication can alleviate stress on employees and increase engagement (Smith et al., 2016). Corporate communication takes on many forms. Kia Motors implemented corporate newsletters, town halls, and a corporate intranet to ensure employees were getting the information they needed and wanted (Tomlinson, 2010). While there are many different mechanisms to deploy communication, often a mixed method of media will reach the maximum number of employees (Iliev & Stoyanova, 2017). Team meetings are also an important part of the communication stream. Within team meetings, employees and leaders discuss their initiatives that directly impact corporate goals and objectives. Teamwork can impact employee engagement. When

employees feel informed and supported they are far more likely to put forth a discretionary effort and work collaboratively as a team (Cooper-Thomas et al., 2018). Corporate initiatives such as communication can increase engagement. However, when paired with corporate rewards and recognition initiatives engagement can intensify further.

Corporate engagement initiatives can have a far-reaching impact on all employees within the organization. Rewards and recognition programs and events are two types of initiatives. Rewards can be a compensation-based award, or another type of motivating gift (gift cards, company store credit, company-branded items, trips, bonuses).

Recognition is public recognition of a job well done by an employee. Recognition can be e-cards, verbal recognition in meetings, or a points-based system within a recognition platform (Cooper-Thomas et al., 2018). A Gallup poll cites 72% of U.S. businesses provided \$22.9 billion in non-cash rewards in 2015 (Gallup, 2007). Corporate events can also increase engagement. These events can help build community within an organization. Such events may be a fall festival, a celebration of achieving a corporate target goal, or celebrating a company anniversary. Rewards and recognition and corporate events can be powerful programs to drive engagement.

Employee engagement occurs at the individual or organizational level.

Organizations must understand that increasing engagement will help employees work at their maximum level (Byham & Wellins, 2015). By encouraging employees to bring their whole selves to work, employers are ensuring engagement begins from day one. Personal growth, leadership support, communication, and corporate engagement initiatives are key levers in engagement. The evidence proves that employees with higher levels of

engagement are more productive. Organizations that ensure employees are emotionally engaged in their work will increase the probability of their length of service intention (Ormrod, 2020). Engagement also links directly to retention.

Employee Retention

The current U.S. job market is competitive. Currently, there are more job openings than employees to fill the roles. Employees are in control of the job market and can be selective in where they want to work (Sears, 2017). The most recent Work Institute 2019 Retention Report cites 35% of employees will leave their jobs to work elsewhere by 2023 and voluntary turnover exceeded 27% in 2018 (Bearden et al., 2019). Employees leave an organization for a variety of reasons; however, there are two main types of turnover; voluntary and involuntary. An employee initiates voluntary turnover, while an organization initiates involuntary turnover (Allen, 2008). Human resource professionals code voluntary turnover as positive and negative. Positive voluntary turnover occurs when an employee has amassed new knowledge, skills, and abilities that land them a new role. Often, they are high-performing employees recruiters lure away with money or benefit packages that the current organization cannot match. In this scenario, the employee is leaving on good terms for a role that will further benefit them and potentially their family, therefore considered positive turnover. Ultimately the organization upskilled the employee into a higher-level competency, making them more marketable. Negative voluntary turnover results from a variety of reasons. Exit interview data shows most reasons include poor onboarding, lack of recognition, relationships with leaders, relationships with coworkers, and lack of contribution and meaningful work (Heathfield, 2019). Negative involuntary turnover are those employees the organization

must dismiss because of performance, behavior, or both. Turnover is preventable in certain areas. Organizations can utilize the strategies of meaningful work, creating a positive environment, and individual connectedness to increase retention.

Employees have a high need to feel as though they are contributing to the organization. Employers must align employees with work that makes them feel what they do matters. By giving the employee meaningful work it gives them a sense of purpose (Byham & Wellins, 2015). When employees see how their work impacts the organizational goals, they become energized. This energy leads to higher forms of retention (Kaye & Jordan-Evans, 2014). Employees grow and develop, often beyond the competencies that align with their current role. Giving them the opportunity for stretch assignments can enhance their association with meaningful work (Adkerson, 2000). Opportunities to contribute meaningful work and see their direct contributions are an important part of keeping top talent within an organization (Corporate Leadership Council, 2004). Creating a space of meaningful work will let employees engage in what they are passionate about (Kaye & Jordan-Evans, 2014). Additionally, employees who find meaning in their work are also learning and increasing their skills set (Fullan, 2011). Organizations that focus on what employees are contributing will help drive retention. In today's marketplace, employees want to have meaningful experiences and work in a positive environment.

A positive work environment is one of respect, collaboration, and trust (Byham & Wellins, 2015). Employees perform higher when there is mutual respect between them, their leader, and the organization. Engaging employees in conversations about how they work best and ensuring that leaders adhere to these suggestions can influence an

employee's stay decision (Byham & Wellins, 2015). How an employee integrates with their team can also influence a decision to stay. Collaboration or lack of within team dynamics can engage or disengage an employee. Being connected with a team in a collaborative environment can impact morale, pride, and team identity (Corporate Leadership Council, 2004). Positive team collaboration can increase constructive interactions and decrease negative exchanges (Ma et al., 2018). Trust is a vital part of a positive working environment. Whether it is the leader or organization, keeping one's word goes a long way with employees. Employees want to know the good, bad, and ugly about the organization (Kaye & Jordan-Evans, 2014). After all, they too have an emotional investment that centers on trust. Even when the news is bad, being transparent with an employee will help them better manage the change and transition that may ensue. When leaders and organizations build trust, employees are more likely to stay. Trust creates an emotional bond that establishes an individual connectedness.

Individual connectedness can take on a variety of forms. What motivates one employee may not motivate another. Many times, Human Resources departments immediately connect compensation to retention, but for many employees, money is not the bond that keeps them. In a 2016 study of why employees leave, compensation was number four on the list. However, the top three reasons are emotional and link to employee connectedness: career development, work-life balance, and management behavior (Sears, 2017). An emotional connection with the organization begins during the pre-boarding phase (Ma et al., 2018). As employees begin to interview for a job, they will decide whether they can work for the leader or not. Often when there is not a fit, they will not proceed with the interview process. However, some employees continue and take the

job. A danger exists in employees taking a job they question as they do not have a connection from the start. How does an employer know what motivates an employee to stay? Ask them. Stay interviews will help leaders uncover what will drive the emotional connection to the organization (Byham & Wellins, 2015). Employees experience difficulty leaving an organization in which they have built connections (Kaye & Jordan-Evans, 2014). Connections can come in the form of teams, leaders, and the organization. The C-level down must ensure all employees are getting what they need to motivate and engage them in their work. This level of motivation and engagement will have a direct correlation to retention. When employees have an emotional connection with their organization it makes it a much tougher decision to leave (Ma et al., 2018).

Retention can have a significant impact on an organization's bottom line. The 2019 Work Institute report cites three of four employees who quit could have been retained if workforce retention strategies were in place (Bearden et al., 2019). Voluntary turnover is on the rise as the U.S. job market becomes more competitive. The skyrocketing costs of turnover to organizations are staggering. Implementing simple retention strategies could significantly impact the bottom line for many organizations. Keeping top talent can impact whether a company maintains its competitive advantage or loses out to other companies (Cardy & Lengnick-Hall, 2011). Organizations can leverage retention strategies to decrease the outflow of their employees. While it is a common misconception that compensation is a key driver in retention, research shows focus on meaningful work, creating a positive environment, and individual connectedness can considerably increase retention. Employees have options and other places to go. The

solution starts with retaining your current workforce by making sure your employees are engaged in their work and connected to the organization.

Generational Differences in the Process

Currently, there are five generations in the workplace as detailed by Zemke (2000): Traditionalists (born before 1946), Baby Boomers (born between 1946 and 1964), Generation X (born between 1965 and 1976), Millennials (born between 1977 and 1997, also identified as Generation Y) and Generation Z (born after 1997). Each of these generations has different motivations, of which organizations must remain cognizant. Onboarding, engagement, and retention can differ for each generation. While some of these generations share similar characteristics, others are very dissimilar. Creating a blend to ensure each generation does not clash in the workplace can be a challenge. While having each of these generations in the workplace can produce much diversity of thought and lead to innovation, conflict management must ensue to maintain engagement and retention. Organizations need not call out the generational differences to create a divide but must keep this concept in mind when strategic planning for onboarding, engagement, and retention.

All generations have different driving motivational forces behind onboarding, engagement, and retention (Zemke et al., 2000). Each generation learns differently, therefore onboarding learning elements must focus on generational learning styles. Engagement for each generation looks different as well. Items that motivate one generation and increase their engagement can be a detractor for other generations. Retention can span different lengths of employment for each generation. While some stay at an organization their entire career, others have many roles in their career span. This

section will discuss the motivations for each generation around onboarding, engagement, and retention and the implications for the human resource professional.

Traditionalists have specific motivating characteristics for onboarding, engagement, and retention. The Traditionalists learn best by setting clear expectations and emphasizing how they will fit into the long-term strategy. While some Traditionalists are comfortable with technology, others are not. Learning practitioners must take a prescribed approach to teach technology. The Traditionalists prefer instructor-led training (ILT) over web-based training (WBT). When onboarding or training the Traditionalists, minimizing technology and maximizing the human element will produce the best results (Zemke et al., 2000). Organizations must emphasize providing contextual learning focusing on the context, tools, and social interaction for Traditionalists (Merriam & Bierema, 2014). Engagement for Traditionalists centers around what they can contribute to the company's success. Traditionalists prefer expectations, policies, and procedures that link their success to the organization's bottom-line results. The Traditionalists have a high need to know that their experience matters. They appreciate the personal touch and building rapport is essential to their engagement. Traditionalist's messages need to be more individualized to their specific accomplishments. Rewards that contain a personalized memento from someone at the C-level can create a spark of engagement (Zemke et al., 2000). Retention for Traditionalists looks different than the other generations. Traditionalists have a tendency of longevity with organizations. They are very stable, loyal, and hard-working. For Traditionalists, it is normal for them to remain an entire career and retire from the same company (Putre, 2013).

Baby Boomers bring different expectations to their motivations for onboarding, engagement, and retention. Baby Boomers have a high need to focus on relationships. They tend to thrive in a community-based environment. When onboarding a Baby Boomer, focus on community is key. Most Boomers have a level of comfort with technology, but for those who are not technologically savvy a prescriptive approach is crucial. Baby Boomers also share the characteristic of relating to instructor-led training (ILT) over web-based training (WBT). Baby Boomers need to learn soft skills as this generation relies more on what you know than whom you know and how you relate to others. Engagement for Baby Boomers should focus on challenges and be futureoriented. Baby Boomers have a more individualistic motivation pattern. Boomers like Traditionalists share the motivation of what they can contribute to the company, messages need to be more individualized to their specific accomplishments. Company perks and public recognition throughout the company are motivating forces for Boomers. (Zemke et al., 2000). Retention for Baby Boomers is similar to Traditionalists. The Baby Boomers share the characteristic of longevity with the Traditionalists. On the job, they are service-oriented and driven. Boomers are labeled workaholics. They work long hours and value their company benefits. They will often remain their entire career with the same company until retirement (Putre, 2013).

Generation X begins to demonstrate very different qualities than their predecessors. For onboarding and training, Generation X thrives in more of a hands-off approach. For this generation, instructors need to demonstrate the learning objective and let them conduct guided discovery to learn. Generation X has a high level of comfort with technology and will develop skills on their own through self-directed learning (Zemke et

al., 2000). Engagement for Generation X should focus on being individuals. For Generation X, work-life balance is key. Generation X, also known as the "me" generation, has a high need for work-life balance. This generation will take or leave a job based on their ability to have a work-life balance (Biswas, 2018). The typical workday is an eight hour day; any more infringes on their work-life balance (Putre, 2013). They work differently, enjoying multi-tasking and taking on varied projects. Generation X's motivation for recognition centers around the volume of work they complete. Retention is a concept Generation X does not care about. They tend to switch jobs often for a better opportunity. Generation X is a flight risk for organizations. While this generation is creative and independent, work-life balance is their main motivation. This generation works to live, not lives to work. Generation X tends to switch jobs often based on perks and is committed to having a life beyond work (Peacock & Ruppel, 2019; Zemke et al., 2000).

Millennials share characteristics with the three generations before them. When onboarding a Millennial, technology is a key driver. This generation is very comfortable with technology, and it is their preferred learning mechanism. However, they enjoy being in an ILT class with other generations so they can learn from their past work experiences. Additionally, they share an attribute with Boomers of needing to learn soft skills to relate to others in the workplace (Zemke et al., 2000). Engagement for Millennials share interesting characteristics with Traditionalists, Boomers, and Generation X. Millennials have many similar characteristics to Traditionalists and Boomers. They like direction and the setting of expectations to see how they can contribute to the bottom line. Generation X and Millennials share the work-life balance motivation (Reutter, 2010). Millennials

also desire work-life balance. Therefore, retention for Millennials aligns with that of Generation X as they too work to live, not live to work (Northouse, 2019; Putre, 2013). However, often outside of work, they engage in activities to help develop their skill sets. An employer who offers them free online training will engage this generation. Additionally, Millennials thrive in the mentorship model. This mentorship model creates experiences for them to learn from and is perceived as vital to their success (Peacock & Ruppel, 2019; Zemke et al., 2000). By placing them with a mentor (often Traditionalists or Baby Boomer) they absorb the experiences and integrate them into their work. Engagement strategies that motivate this generation also include formal onboarding, frequent 1:1 meeting with their leaders, and team building (Peacock & Ruppel, 2019; Zemke et al., 2000). Millennials can also be a flight risk. Ongoing learning and development are vital to their engagement and retention. When an organization appears to have given them all they can learn, it is time for them to move on. They are a very resilient and optimistic generation. Connecting this generation with a mentor can help their potential flight risk (Peacock & Ruppel, 2019; Zemke et al., 2000).

Generation Z also shares characteristics with the other generations. For onboarding, engagement, and retention Generation Z focuses on experiences. Onboarding should involve more activity and less theory. For this generation experiential learning is vital to their success. They need a high level of structure to guide their learning but pairing it with experiences helps solidify the objectives. Generation Z requires high touch, human approach to their learning. Like the Traditionalists and Baby Boomers, an ILT environment works best (Zemke et al., 2000). The engagement of Generation Z is very similar to Millennials. They engage in learning activities outside of work to increase

their skill set. For this generation, though, it is less about the learning to learn and more about learning to quickly move up the corporate ladder (Peacock & Ruppel, 2019). Retention studies are ongoing with Generation Z. Current findings align with that of the Millennial. Once they feel they have experienced all they can with an organization it is time to move on (Putre, 2013).

With these differences how does an HR department effectively onboard the different generations in the workplace? Creating a blended approach to learning can impact all generations. Importance should focus on their similarities, rather than their differences. While some generations may learn better through the ILT approach, others will learn better using technology. Giving each generation a choice in their approach will help them be more comfortable in the space and willing to learn. The focus should be on cross-generational learning. Designing activities that will help all generations learn from each other can help streamline the focus on collaboration (Biswas, 2018). Using these learning elements can transfer to the engagement of generations as well.

While each generation shares similarities of engagement, there are some distinct differences HR departments need to be aware of. Using an engagement strategy that works for one generation on all generations can be demotivating. Designing engagement strategies with the goal of diversity for each generation helps every group feel included. For each of these generations' engagement has a direct effect on retention.

Each generation has a vast difference regarding retention. Organizations must focus on these differences when measuring retention, knowing generational differences can have a major impact. Implementing strategies such as cross-generational mentoring

can have a direct effect on all generations within the organization. The focus should also remain on the individual for retention purposes.

For this study, generational differences are vital. NERDs are Millennials in the workplace, managed by Generation X and Baby Boomers. The C-level in the organization consists of Baby Boomers and Traditionalists. To ensure success, it is imperative each generation know the motivations of the Millennials to confirm program goals are properly aligned. Onboarding for the NERDs blends technology, the human approach, and experiential learning. They work in an 85/15% split. Eighty-five percent of the time they are with their host team doing development work, 15% of their time is spent in training. Engagement is a focus of their leader, mentor, and life coach. Not only is focus on providing meaningful work, but each NERD also meets bi-weekly in 1:1 meetings with their leader and life coach. Additionally, they have daily interactions with their mentor. Retention is an ongoing metric, measuring the return on investment of the NERD program. This study examined if extending onboarding using the NERD program as the sample impacts long-term engagement and retention.

In conclusion, different generations have unique motivations around onboarding, engagement, and retention. Organizations need to remain cognizant of these differences. The diversity each generation brings to the workplace can create innovative strategies to take organizations to the next level. Organizations must blend solutions for onboarding to connect learning for each generation. Additionally, uncovering motivational strategies for each generation can help engagement. Finally, keeping sight of potential flight risks can target retention.

Conclusion

The research demonstrates that onboarding is the foundation for long-term engagement and retention. Organizations know that ineffective onboarding is a problem, but there is no definitive solution in the evidence. Engagement and retention are two target metrics for most organizations. Turnover causes a huge loss of revenue on recruitment and hiring. Clearly, turnover is an issue, is effective onboarding the answer? Effective onboarding can directly impact engagement and retention. Organizations that create an emotional connection with their employees early in the process are more likely to have higher levels of overall engagement and retention. Ultimately, this emotional bond impacts their productivity and new employees will come up to speed and reach production efficiency more quickly (Martin, 2018).

Many factors can influence engagement. An employee's engagement starts during the pre-boarding phase and continues throughout the employee lifecycle. Employees who remain engaged are a decreased flight risk. Those who become disengaged often leave, or worse yet stay and become a morale drain on others in the organization. Organizations need to focus on creating powerful moments throughout an employee's tenure with their organization to ensure emotional connectedness.

Retention is a key driver in an organization's success. Keeping top talent not only can impact the financial bottom line but also helps to retain institutional knowledge. When a high performer leaves the organization there is not only a replacement cost but also a cost of the knowledge that left with them. In the time that follows to recruit, hire, train, and develop the replacement there will be a productivity cost associated with the initial employee loss (Kim, 2019). Turnover can be contagious; therefore organizations need to create and maintain a plan for retention (Ma et al., 2018).

Generational differences in the workplace impact the way organizations onboard, engage, and retain employees. Employers must be cognizant of how each generation responds to motivational factors. Onboarding often contains many learning elements. Human resource practitioners need to tailor learning for each generational need. Engagement also looks different for each generation. The motivation that leads to engagement can have similarities and differences per generation. Making sure diversity and inclusion are a part of the engagement strategy will benefit all generations. Retention cannot be a one size fits all metric. Generations have different thoughts and emotional connections to their jobs. Organizations must have a high level of awareness of this concept for retention purposes.

Organizations need top talent to produce their products and services. These organizations will not remain competitive if they continue to lose their top talent and suffer productivity issues. Creating effective onboarding programs can affect an organization's engagement and retention. This study is vital to research in the human resource community to examine the correlation between extending onboarding and its solution for long-term effects on engagement and retention.

CHAPTER THREE

Methodology

Introduction

The research establishes that onboarding sets the groundwork for long-term engagement and retention. Employee-centric onboarding programs result in higher levels of retention (Namely-HR for Humans, 2018). Furthermore, Bauer and Erdogan (2011) cite that organizational effectiveness is higher for those companies that engage in creating a valuable onboarding experience (Bauer & Erdogan, 2011). The cascading effect of successful onboarding enhances the overall employee experience, resulting in increased productivity and improved retention (Metcalf, 2019). Organizations that ensure onboarding is effective improve the employee experience, which increases retention and creates a more connected workforce. This study examines the relationship between extending onboarding and its long-term effects on engagement and retention.

Beginning a new job can be stressful, but effective onboarding can help ease the anxiety connection. Psychologists indicate that humans have a profound desire to be able to express their authentic selves. To be an authentic version of self, people must align their internal experiences with external expressions (Kernis, 2003). Onboarding programs that allow employees to bring their best, authentic selves to work begin connecting engagement and retention from day one. As a result, new employees will feel positive, a sense of purpose, and begin an emotional bond with the organization. In turn, organizations will gain a highly engaged employee who is more likely to stay at the company (Cable et al., 2013).

The transition from a school environment to the world of work can often be difficult. To ensure a beneficial transition from school to work, the sample company used in this study introduced the NERD program (New Employee Recruitment and Development) to help new Associate Software Engineers shift from school to work. As previously mentioned, the average turnover rate for software engineers is 21.7% (Forrest, 2018). Allen (2008) and Cascio (2006) report that replacing an employee can cost 90– 200% of that employee's annual salary (Allen, 2008; Cascio, 2006). Glassdoor (2019) and Payscale (2019) estimate the national salary average of a Software Engineer is \$95,500 (range 61k–130k). At the low end of the salary band, a 90% estimate of the engineer's salary would be \$54,900 the company would be turning over with each departure. Within companies that are primarily technology based, this number can greatly impact their bottom line. The sample company instituted the NERD program to help increase the engagement of Associate Software Engineers and improve retention. Therefore, an extended process of onboarding can greatly impact overall profitability for all types of organizations.

Hypotheses and research questions guided the study. Quantitative methods of descriptive statistics for engagement and chi-square for retention measured the two hypotheses.

Hypothesis One: The average engagement scores of NERDs will be higher than non-NERDs by year.

Hypothesis Two: There is a statistically significant difference in retention between NERDs and non-NERDs by year.

The qualitative part of the research contains one primary research question, two sub questions, and a mixed method question. Qualitative methods of interviews, focus

groups, and open-ended questions on the end of program questionnaire inform the research questions. The primary research question addresses how do onboarding efforts impact engagement and retention? Sub-questions explore:

Sub-question One: What do NERDs identify about the program that kept them most engaged?

Sub-question Two: What influences employees to stay?

The mixed methods question asks: To what extent does extending onboarding impact engagement and retention of NERDs?

Researcher Perspective

The researcher has been a practitioner in the human resource space for over 20 years and has been exposed to many areas of specialty in human resources. The researcher has specialized in learning, organizational development (OD), organizational effectiveness (OE), employee relations, life coaching, and recruiting. Within organizational development and effectiveness, a segment of focus is employee engagement and retention. Many metrics measure employee engagement and retention. The annual employee engagement survey organizations administer measure overall employee engagement and satisfaction. The researcher has designed and implemented engagement surveys for organizations in many different industries. Employee engagement surveys are designed by OD/OE practitioners based on alignment with the organizational mission, vision, values, and competencies. In most organizations, a thirdparty vendor deploys the survey to ensure anonymity to participants who take the survey. Results are tabulated by the vendor and sent to the practitioner within the organization. The practitioner analyzes the results and designs performance interventions for the organization to increase engagement areas of opportunity. If engagement areas of

opportunity are not addressed, employee retention is affected. The researcher has taken a great interest in the reasons engagement and retention affect an organization.

As previously mentioned, engagement and retention are closely intertwined. Those with lower levels of engagement are less likely to be retained by an organization. OD/OE practitioners are also responsible for creating retention plans for an organization. Often, when engagement areas of opportunity are addressed from the survey, retention increases. The researcher has had the opportunity to work with many organizations that were struggling with engagement and retention. She has developed a reputation for coming into an organization, conducting an engagement needs assessment, designing a plan to increase engagement and retention, and deploying the performance intervention solution throughout the organization. Many performance interventions have included designing and deploying onboarding and ongoing training programs. As a result, many of the organizations the researcher has worked with over the years have seen a significant rise in engagement and retention.

Conducting engagement surveys and creating retention plans have piqued an interest for the researcher as consistent themes have developed over the years. Caldwell and Peters (2018) cite research on exit interviews that employees leave because of poor onboarding, lack of training, and lack of opportunities (Caldwell & Peters, 2018). The researcher has witnessed these themes as well. Specifically, onboarding, beginning the organizational journey seems to be a catalyst for engagement. The researcher has long suspected that extending onboarding can increase long term engagement and retention. Conducting this study will help enhance and inform the body of research of human resource professionals around onboarding.

The researcher acknowledges while she has many valuable experiences that contribute to this study, there can also be a level of bias based on opinion. To counteract bias, the researcher recognized her opinion, and precautions were in place to minimize disruption of the study. The application of several methods ensured validity and reliability. The researcher read the qualitative accounts from a researcher's lens to ensure reflexivity has been applied. NERDs contributed to the study by engaging the participant's lens through reading notes and ensuring accuracy in capturing their stories to further triangulate the research. Finally, two professional colleagues conducted peer review to ensure clarity and congruence were present to further strengthen the credibility of the research.

The researcher worked at the sample company during the time of this study. Specifically, the researcher works for a large Fortune 500 financial firm in the technology division. The position encompasses several functions in technology learning and organizational development: culture, communication, change, New Employee Recruitment and Development (NERD) program, and leadership development. All of these elements in the learning and organizational development space require a component of employee engagement.

Theoretical Framework

The theoretical framework for this study encompasses organizational development (OD) theory and Kotter's eight-step organizational change model. Both theories focus on external change and how individuals' transition through change.

Organizational change theory improves employee competency to assist in transitioning through change (Austin & Bartunek, 2003). Kotter's eight-step organizational change

model focuses on the steps to move organizations through change and transition (Armenakis, 1999). This study connects organizational development theory and Kotter's eight-step organizational change model by examining how employees react to change by participating in extending onboarding and its long-term effects on engagement and retention.

The research questions were formed using OD theory and Kotter's work as the foundation. When an individual begins a new role within an organization, they experience a high level of external change. Along with this change comes anxiety stemming from fear of being in a new workplace (Karambelkar & Bhattacharya, 2017). Hypothesis one asserts the average engagement scores of NERDs will be higher than non-NERDs by year. Additionally, it prompts the question of how do onboarding efforts impact engagement? Effective onboarding begins the process of organizational socialization, whereby new employees acquire the knowledge, skills, and abilities to transition from an outsider to an insider within the organization. When the new employee's fear is not addressed by an effective onboarding program, they will begin to experience elevated levels of anxiety stemming from feelings of separation and social isolation (Snyder & Crane, 2016). These feelings begin to immediately impact the new employee's engagement. Hypothesis two states there is a statistically significant difference in retention between NERDs and non-NERDs by year. In addition, it prompts the question of how onboarding efforts affect retention? If a new employee experiences constant levels of stress from lack of training and support, their levels of engagement are reduced (Adkerson, 2000). Over time the reduced levels of engagement lead to the employee exiting the organization (Morgan, 2004). The secondary research questions are derived from the premise of reducing anxiety when beginning a new role. Additionally, the secondary research sub-questions explore other areas that enhance engagement and retention. By integrating organizational development theory and Kotter's eight-step organizational change model as the foundation for onboarding, many of these barriers can be overcome.

Kotter's model and OD theory apply a systematic approach to shift individuals, teams, and organizations from a current state to the desired state. Data collected compared the job title of Associate Software Engineers with those in the NERD program and those who do not participate in the NERD program. Measures included engagement scores and retention metrics. Data exhibits how the NERD program affects engagement and retention. The current state of the organization is one in which the Associate Software Engineer has high turnover. The desired state is to decrease turnover and increase engagement through the NERD program.

OD theory and Kotter's model served as a foundational guide to evaluate the data in this research study. Both paradigms focus on an external change mechanism occurring, and the internal transition of the individual, team, or organization. The premise of this research study is that extending onboarding increases engagement and retention.

Extending onboarding is the external change that occurs, increasing engagement and retention for the individual, team, or organizations are the internal transition adjusting to the change. This study uses organizational development theory and Kotter's eight-step organizational change model as the foundation to support extending onboarding and its long-term effects on engagement and retention.

Research Design and Rationale

The study addresses the issue of extending onboarding to increase long-term engagement and retention. Organizations that do not invest in an effective onboarding program risk losing their new employees (Snell, 2006). The research design used a mixed methods approach to measure engagement and retention of those with the job title Associate Software Engineer. Further exploration compared those participating in the NERD program and those not participating in the NERD program. Mixed methods support the collection and analysis of quantitative and qualitative data associated with this study of engagement and retention of Associate Software Engineers. Furthermore, an a priori context directed the study as assumptions were made based on previous research and the researcher's experience prior to this study taking place. Specifically, the researcher implemented a pragmatic approach that helped answer questions mixing quantitative and qualitative methods simultaneously (Creswell & Plano-Clark, 2018).

Mixed methods explored the breadth and depth of understanding of how onboarding affects engagement and retention as demonstrated in Figure 3.1. This methodology is relatively new in the social science space. The methodology originated around 1980 and has been through several iterations. Present day mixed methods are still in transition, but evolving (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018). Mixed methods bring together data by using different measures for the same or similar concepts to provide a more robust measure (Creswell & Poth, 2018). The quantitative portion demonstrated the quantifiable metrics of engagement and retention, while the qualitative portion gave voice to the participants and strengthened the quantitative results. Additionally, triangulation of data used different measures for the same concept to provide a more robust measure (Creswell & Poth, 2018).

The researcher used a mixed methods convergence model. Within this design, the researcher collected and analyzed qualitative and quantitative data concurrently. The qualitative and quantitative data had equal weighting as each data type enhanced and explained the other. Quantitative data centered around engagement and retention numbers of NERDs and non-NERDs. Furthermore, quantitative data measured program satisfaction for NERDs. Focus groups, interviews, and open-ended responses in end of program questionnaires comprised qualitative data. The qualitative data expanded on the quantitative data, providing a more detailed explanation of the numbers. Merging of both types of data occurred during the interpretation stage. The rationale for using this mixed method approach focuses on the merging of the qualitative and quantitative data to draw conclusions about the research (Creswell & Plano-Clark, 2011). Data gathering and analysis consisted of several data measurement types.

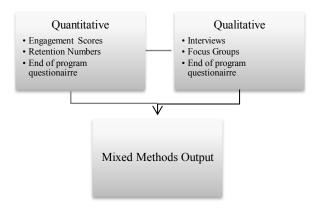


Figure 3.1. Visual model of data types for mixed methods.

There are several distinct advantages to utilizing a mixed methods approach. As previously mentioned, the researcher assumed a pragmatic approach. Creswell and Plano-Clark (2018) define pragmatism as "the focus is on the consequences of research, on the primary importance of the question asked rather than the methods, and on the use of

multiple methods of data collection to inform the problems under study" (p. 37). One of the defining advantages of using a mixed methods approach is the research can speak to a broader audience by using quantitative and qualitative data. This, in turn, leads to a more comprehensive understanding of the study (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018). In this study, blending the quantitative and qualitative data in a convergence model design allowed the quantitative and qualitative data to merge in answering the hypotheses and research questions.

While there are several advantages, there are disadvantages to using mixed methods as well. Mixed methods are an evolving design that is still relatively new. Therefore, it is often difficult to understand how quantitative and qualitative methods blend. Additionally, the researcher must collect, analyze, and integrate quantitative and qualitative data which requires knowledge, skills, and abilities in both data types (Creswell & Creswell, 2018; Creswell & Plano-Clark, 2018). Even with these potential disruptors, the researcher strongly believes that mixed methods were the appropriate application. The quantitative data shows compelling evidence of engagement and retention numbers, while the quantitative data gives voice to the NERDs and what makes them engage and stay.

Site Selection and Participant Sampling

The sample organization has Associate Software Engineers in ten locations throughout the United States: Austin, Texas; Chicago, Illinois; Westlake, Texas; Denver, Colorado; El Paso, Texas; Indianapolis, Indiana; Orlando, Florida; Phoenix, Arizona; Richfield, Ohio; and San Francisco, California. The NERD program is running in six of these locations: Austin, Texas; Westlake, Texas; San Francisco, California; Denver,

Colorado; Phoenix, Arizona; and Raleigh, North Carolina. The future of the NERD program is to bring on NERDs in the remaining four locations.

The NERD program began in September 2017 with the first cohort containing three NERDs in Austin, Texas. Given that the NERD program focuses on recruiting new college graduates for the Associate Software Engineer position, cohorts begin the month after college graduation dates. Cohorts begin in January, March, June, and September. The March cohort is the exception as it serves as a catch-up cohort for those who may have graduated late or had extenuating circumstances preventing them from joining in January. Data has been pulled from 27 cohorts in six locations (see Appendix B).

Associate Software Engineers are new college graduates or new to the industry with no experience or less than a year of experience. The majority have degrees in Computer Science, Engineering, or Programming. There are a few that have degrees in another subject such as Math with a computer minor. A small percentage of the population have their primary degrees in other fields and attended a coding camp to obtain a certificate in programming. The NERD program serves as the intervention being applied to Associate Software Engineers going through the NERD program. Those in the NERD program represented the experimental group. All other employees in the Associate Software Engineer job role not in the NERD program served as the control group. Human Resource (HR) data provided the sample pulled from the Human Resource Information System (HRIS) on the job code Associate Software Engineer. While all Associate Software Engineers perform the same type of coding work, NERDs are exposed to additional training and challenging project opportunities throughout the program. Therefore, the selection process for the NERD program is more rigorous.

NERDs are selected through a comprehensive interview process. NERD candidates apply through the organization's website. Once a recruiter screens the candidate's resume ensuring they have the knowledge, skills, and abilities for the role, they schedule an interview. This initial interview with a recruiter consists of behavioral interviewing questions for organizational fit and technical questions to gauge technical competency. If the candidate does not do well during this interview they are released from the process. However, if they do well, they will advance to round two interviews. Round two interviews are one hour in length and consist of a member of the NERD leadership team, a leader who will host the NERD on their team, and a senior engineer who will conduct a technical coding exercise with the potential NERD. The hour encompasses behavioral interviewing questions and a technical coding exercise. After the interview, the interview team debriefs and makes a go, no go decision on the candidate. The recruiter informs the candidate of the committee's decision.

Once a NERD begins at the sample organization, they begin the program on the first day of employment. They go through a two-week boot camp where they learn the tools and processes to function on a software development team. In contrast, an Associate Software Engineer that does not join the NERD program learns by shadowing other team members to learn the tools and processes of their role. NERDs continue gaining high levels of soft skills and technical training throughout their program. The organization builds capacity by engaging in a meticulous interview process and developing NERDs through the program (Fullan, 2011). Collection of data occurs at various points in the NERDs and Non-NERDs career.

Mixed Methods Data Collection Procedures

For this study, a variety of sources supported data collection. Quantitative data was comprised of engagement numbers, retention metrics, and end of program questionnaires that measured program satisfaction. The NEXUS system supplied engagement scores for the years 2017–2019 (Appendix C). The human resource information system (HRIS) provided retention data metrics for the years 2017–2019. Survey Monkey deployed and housed the data for the end of program questionnaires (Appendix F). Descriptive statistics were calculated using SPSS 26 comparing NERD and non-NERD engagement scores. A chi–square test was conducted using SPSS 26 comparing NERD and non-NERD retention metrics. End of program questionnaires were calculated to measure program satisfaction. Each NERD cohort combined to form one set of data per year. For example, in 2018 there were seven cohorts across four locations. All seven cohorts were combined into one data set for the year 2018.

Interviews (Appendix D), focus groups (Appendix E), and open-ended responses from the end of program questionnaires (Appendix F) comprise the qualitative data. Table 3.1 displays the research plan timeline. Interviews focused on individual engagement items, while focus groups examined the NERD community. Each NERD went through interviews to provide insight to the researcher on the sub-questions around their individual engagement. Interviews provided a forum in which the researcher asked follow-up questions of the participants to provide more information. Each NERD cohort in each location participated in focus groups to explore what kept them engaged as a NERD community. The purpose of the focus groups was to further gain perspective from the NERD community about their perceptions, opinions, and attitudes regarding the program. Finally, the researcher examined open-ended responses in the end of program

questionnaires to gain further insight into the engagement of the NERDs. The researcher used all elements to create a complete picture of the individual and community engagement of the NERDs.

Electronic files organized the qualitative data. The files contained data named with preliminary conceptual codes. The codes identified individuals interviewed or participants in the focus group, location, and date. The researcher broke the codes further into relationship codes that linked the initial conceptual codes. The qualitative data was loaded into the NVivo 1.3 system, which analyzed and developed themes based on participant perspective and characteristics. These themes came from repetitive topics, ideas, and patterns. The researcher examined the themes and compressed them into meaningful segments that told the story of the participants. The product represents the key learnings of the study that align with the primary and sub research questions.

Each participant received a consent form (paper-based or electronic form) before contact with an individual or group. The consent form explains the purpose of the study, the right of each individual to participate or withdraw at any time, covers the confidentiality for each participant, explains any known risks associated with the study, and covers the benefits of the research. Each type of consent form had sections for signatures. The electronic version cited that by entering their name, this serves as an electronic mark held to the same standard as a handwritten signature.

The researcher recorded interviews and focus groups and transcribed them into an electronic document using transcription software, along with handwritten notes.

Interviews and focus groups took place either face-to-face or using an electronic video-conferencing platform. The primary research and sub-questions served as the question

foundation for interviews and focus groups. The initial rounds contained structured interviews and focus group questions, but also encouraged free-flowing conversation. The researcher extended requests for follow up conversations with individuals who did not get an opportunity to share, which helped overcome participants that dominated the conversations. Additional documents served as a base to expand the qualitative information and triangulate data. Document collection included gathering NERD end of program feedback questionnaires, which featured open-ended responses. The program feedback questionaries provided feedback about the NERDs program experience in their own voice. Interviews, focus groups, and comments in the end of program questionnaires served as the groundwork for data codes and themes.

Table 3.1

Research Plan Timeline

Timeframe	Action	Purpose/Focus
September 2017– June 2018	Cohort 1 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
May 2018	Employee Engagement Survey administered (NEXUS survey)	The average engagement scores of NERDs will be higher than non-NERDs by year.
June 2018–March 2019	Cohort 2 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
September 2018– June 2019	Cohort 3 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?

Timeframe	Action	Purpose/Focus
December 2018	Retention numbers calculated (HRIS system)	There is a statistically significant difference in retention between NERDs and non-NERDs by year.
January 2019– October 2019	Cohort 4 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
March 2019– December 2019	Cohort 5 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
May 2019	Employee Engagement Survey administered (NEXUS survey)	The average engagement scores of NERDs will be higher than non-NERDs by year.
June 2019–March 2020	Cohort 6 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
September 2019– June 2020	Cohort 7 begins (interviews, focus groups, end of program questionnaire administered; documents collected)	What do NERDs identify about the program that kept them most engaged? What influences employees to stay?
December 2019	Retention numbers calculated (HRIS system)	There is a statistically significant difference in retention between NERDs and non-NERDs by year.

Data Analysis

The researcher obtained data from several sources and analysis occurred in six steps. Analysis of quantitative data occurred first through the examination of two elements: engagement numbers and retention metrics. The first step focused on engagement. The NEXUS system that deploys and houses annual employee engagement

data supplied engagement numbers for the years 2017–2019. Step two in the process examined retention. Retention metrics were pulled from the human resource information system (HRIS) for the years 2017–2019. Survey Monkey is a cloud-based online survey development software that deployed and housed the questionnaire data. Data from the end of program questionnaires comprised step three.

Qualitative methods included the collection of interviews, focus groups, and the open-ended comments from the end of program questionnaires that provided more detail of the engagement and retention story. Each NERD participated in individual interviews in step four. Step five comprised focus groups conducted with every NERD cohort in each location. Finally, step six in the process included the comments from the questionnaire that support the research.

To ensure validity and reliability, the researcher applied several methods. From a quantitative perspective, this study is classified as quasi-experimental. NERDS and non-NERDs were not subject to random assignment as the NERD participants are selected for the program. The intervention is the application of the NERD program (Rossi et al., 2019). Within the quantitative perspective, it is critical to ensure integration of validity and reliability. Validity confirms that the test measures what it intends to measure. Reliability ensures the instrument or test is used consistently in different situations (Field, 2018, p. 13). The researcher applied a chi–square test to compare the retention of NERDs and non-NERDs by year to determine whether there was a significant relationship between the categorical variables. The validity and reliability of the chi–square tests are measured using the p-value (Field, 2018). Reducing threat is a key component in

qualitative research. Threat is a component that can lead to an incorrect conclusion in the research. Peer review helped mitigate threats and ensure triangulation (Field, 2018).

Within the qualitative element of the study, validity confirms that the research questions are being answered in a way that is accurate and reflects the participant's voices (Leung, 2018). Reliability consists of being thorough throughout the research processes and presenting accurate results (Leung, 2018). The researcher documented processes and procedures to ensure any repeated study can follow the techniques. To apply reflexivity, the researcher read the qualitative account from a researcher's lens. Using this method ensured credibility "the results are an accurate interpretation of the participants' meaning" Creswell & Poth, 2018, p.261). In addition, the NERDS contributed, giving the participant's lens by reading notes and ensuring the accuracy of their stories to further triangulate the research focusing on validity and reliability. This method confirms authenticity as participants confirm their voices are heard (Creswell & Poth, 2018). Finally, to ensure clarity and congruence are present members of the researcher's peer writing group conducted a colleague review. This method supports "critical appraisal of all aspects of research" (Creswell & Poth, 2018, p. 258).

The researcher diligently validated ethics and responsibility in all areas of the research. It is a researcher's job to do no harm and ultimately the study should improve conditions. Therefore, it is imperative to report honesty in findings. Figure 3.2 demonstrates how this study examined if extending onboarding can influence long term effects on engagement and retention, thereby improving the workspace for employees.

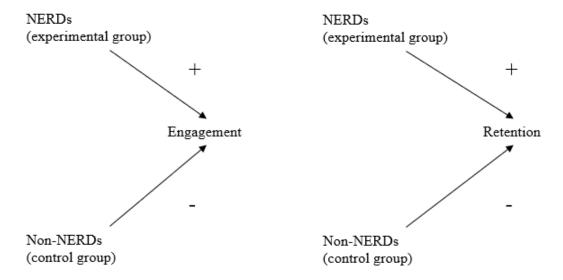


Figure 3.2. Visual model of theory.

Ethical Considerations

Integrity and ethics are vital parts of research. To ensure all guidelines are appropriately followed and documented, Baylor University has doctoral candidates engage with the Institutional Review Board (IRB). The purpose of an IRB is to validate that the study follows "guidelines for conducting ethical research" (Creswell & Poth, 2018, p. 151). There are six areas of ethical significance all researchers need to consider: voluntary participation, informed consent, confidentiality and anonymity, the potential for harm, and communicating the results.

Data was stored in the researcher's secured office. Specifically, electronic data was stored on the researcher's biometric, and password protected personal computer. A locked file cabinet in the researcher's office held hard copy data. Data retention occurred through the duration of the study (2017–2021) and for three years after (2021–2024). The researcher stripped identifiers from samples and coded the data. The researcher shared only aggregated data with the sample organization upon completion of the study.

Additionally, the researcher monitored for potential issues throughout the study. While this study carried minimal risk, the researcher stayed aware of any unanticipated problems and handled them on a case-by-case basis (Creswell & Poth, 2018).

Limitations and Delimitations

Study limitations are characteristics of design or methodology that impact or influence the interpretation of the study. Limitations can constrain the generalizability of findings and affect internal and external validity. This study has two notable limitations. First, this study does not include participants in job codes other than Associate Software Engineer. Therefore, this study is not compatible with random sampling where all members have an equal opportunity in sample representation. Second, this study may not have transferable results to other industries. As previously stated, technology has high rates of turnover, the results of this study may vary according to industry.

The goal of delimitations is to scope the study properly. One delimitation of this study is participant exclusion. This study focuses on the NERDs as the experimental group and those not participating in the NERD program with the title Associate Software Engineer. As previously stated in the limitations section, this study does not include other job codes and therefore is a boundary of this study. Additionally, by selecting to only look at onboarding effects on engagement and retention, a boundary has been set to only discuss those criteria. Extending onboarding can affect various elements throughout the employee lifecycle.

Future implications to further this study could look at other elements that effective onboarding impacts. Elements for future studies can include how effective onboarding influences an employee's performance and internal promotion rates. Furthermore, other

industries can replicate this study to examine similar results. Lastly, this study could expand to a longitudinal study to examine far reaching effects on extending onboarding on career projection and long-term engagement.

Conclusion

This study examined onboarding and its effects on long term engagement and retention to inform organizational change management in the human resource industry. The researcher applied a mixed method convergent design approach with a pragmatic worldview lens overarching the study. Collection and analysis of quantitative and qualitative data occurred concurrently, then merged to interpret results to answer the research questions. The results of this study have implications for changing the way organizations conduct onboarding, thereby affecting the long-term engagement and retention of their employees. For this reason, the next chapter analyzes the results and considers the implications of the research findings.

CHAPTER FOUR

Results and Implications

Introduction

The current research, literature, and data collected on the NERD program suggest that effective onboarding can positively influence engagement and retention. The research cites a recurring message, organizations that create emotional connections with their employees early in the onboarding process are more likely to have higher levels of overall engagement and retention (Martin, 2018). This quasi-experimental study compared results from three annual cohorts of Associate Software Engineers who participated in the NERD nine-month extended onboarding program (n = 184) and those who did not (n = 261). Specifically, this study used a convergent mixed methods approach to examine data collected on NERDs and non-NERDs engagement and retention within the sample organization. A convergent mixed methods approach was selected as both qualitative data and quantitative data were collected and analyzed simultaneously (QUAL+QUAN=converged results). The two data streams were merged to answer the main research focus. This chapter contains the results of the two hypotheses, primary research question and sub-questions, and mixed methods question that guided the inquiry.

Hypothesis One: The average engagement scores of NERDs will be higher than non-NERDs by year.

Hypothesis Two: There is a statistically significant difference in retention between NERDs and non-NERDs by year.

Primary Research Question: How do onboarding efforts impact engagement and retention?

Sub-question One: What do NERDs say about the program that kept them most engaged?

Sub-question Two: What influences employees to stay?

Mixed Methods Question: To what extent does extending onboarding impact engagement and retention of NERDs?

This chapter reveals the results for the quantitative data findings, qualitative data findings, and how both types of data merge to tell a comprehensive story around engagement and retention. The results of this study suggest that longer onboarding is a solution for the human resource community regarding long-term engagement and retention.

Quantitative Data Findings

Data for the quantitative section of this study included engagement numbers and retention metrics. Engagement and retention numbers were pulled using the job code of Associate Software Engineer which captured the NERD and non-NERD populations for engagement and retention. The NEXUS system deploys, tabulates, and analyzes the annual employee engagement survey for all employees at the sample organization.

Engagement data was pulled for NERDs and non-NERDs representing the years 2017–2019. Appendix C represents the employee engagement survey which uses a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). Engagement scores are represented for Associate Software Engineers as an overall average for those who participated in the NERD program and non-NERDs that did not participate in the program. To protect the anonymity of the employee engagement survey, only aggregated scores by group were released to the researcher. Detailed

employee information is held in the human resource information system (HRIS) at the sample company. Retention data was pulled from the HRIS for the years 2017–2019. Data was summarized to include retention per year for NERDs and non-NERDs. Additionally, as each NERD completes the program, they are given an end of program questionnaire to measure program satisfaction that included eleven questions. Six of these questions used a five-point Likert scale (1 = Extremely Dissatisfied, 2 = Slightly Dissatisfied, 3 = Neutral, 4 = Very Satisfied, 5 = Extremely Satisfied). Five questions contained open ended responses that are included in the qualitative data section.

Quantitative metrics included descriptive statistics for engagement scores and an inferential test for retention. The mean overall engagement scores were pulled from the NEXUS employee engagement system for the years 2017–2019 encompassing NERDs and non-NERDs. Further analysis could not be completed as the organization did not provide standard deviation measures or mean scores for any subscales. An inferential test was used to compare retention between NERDs and non-NERDs. The chi–square test of independence determines if two categorical variables are related. Additionally, it can be used to predict the value of one variable if the other variable is known (Field, 2018). Using SPSS 26, an inferential chi–square test of independence was conducted with two categorical variables: Group (coded NERD = 0, non-NERD = 1) and Retained (coded Yes = 0, No = 1). The p-value measured the validity and reliability of the chi–square test (Field, 2018). Within this section, results of the quantitative methods answer the hypotheses:

Hypothesis One: The average engagement scores of NERDs will be higher than non-NERDs by year.

Hypothesis Two: There is a statistically significant difference in retention between NERDs and non-NERDs by year.

As previously mentioned, NERDs engage in a structured onboarding program that includes additional soft skills and technical training, the assignment of a mentor and engages in an 85–15% split of their time between work and training. Research finds that those who engage in a structured onboarding process have higher levels of emotional connectedness with an organization and are more likely to be retained at the three-year mark (Martin, 2018). In the preceding section, the researcher disclosed that further analysis of engagement scores could not be conducted as the organization only provided aggregate scores for NERDs and non-NERDs and did not provide standard deviation measures or mean scores for any subscales. Therefore, Table 4.1 displays average annual employee engagement scores for NERDs and non-NERDs. NERDs mean engagement score is marginally lower than non-NERDs. The mean difference is minimal (less than .05). However, without access to variance in scores, the researcher cannot determine the statistical difference between NERDs and non-NERDs on employee engagement.

Table 4.1

Annual Mean Employee Engagement Scores for NERDs and non-NERDs

Year	NERDs	NERDs	Non-NERDs	Non-NERDs
i eai	n	M	n	M
2017	3	4.10	88	4.14
2018	31	4.15	130	4.18
2019	150	4.15	43	4.20
Total	184		261	

While there is a minimal difference in engagement scores between NERDs and non-NERDs, the scores are above the national average. Average engagement scores in the United States range from 70–78% over the last ten years (Gallup, 2020). In 2018 the US average employee engagement score was 72%. In 2019 the US average employee engagement score was 71% (Gallup, 2020). NERD's average raw engagement score was 4.13 over the three-year timeframe which is equivalent to an 82% engagement score. Non-NERDs average raw engagement score was 4.17 during the three-year timeframe which is equivalent to an 83% engagement score. Research shows that higher engagement scores lead to elevated levels of individual performance, lower turnover, and improved organizational commitment (Eldor & Vigoda-Gadot, 2017). Additionally, higher levels of engagement correlate with enhanced innovation, customer service, and fewer errors (Schaufeli, 2012).

The literature cites employees who have higher levels of engagement also have higher retention rates (Adkerson, 2000; Cooper-Thomas et al., 2018; Morgan, 2004). Table 4.2 represents the descriptive statistics for 2017–2019 of annual retention for NERDs and non-NERDs.

Table 4.2

Annual Retention Descriptive Statistics for NERDs and non-NERDs

NERDs				Non-NERDs		
year	total	retained	% retained	total	retained	% retained
	n	n	%	n	n	%
2017	3	3	100%	88	79	90%
2018	31	31	100%	130	116	89%
2019	150	135	90%	43	20	47%

The retention of NERD group surpassed the non-NERD group from 10%–43% each year. Additionally, the annual retention descriptive statistics for NERDs and non-NERDs numbers show numbers shifted between 2018 and 2019 as more of the Associate Software Engineers opted to join the NERD program.

Retention was also evaluated using a chi-square test for NERDs and non-NERDs. The chi-square test of independence analyzed if there was a significant relationship between extending onboarding of the NERD group and retention. The results demonstrated a statistically significant relationship between the NERD and non-NERD groups, $X^2(1) = 8.19$, p = .004. A small effect was indicated by the effect size (Phi = .14) (Field, 2018).

NERDs engage in an end of program questionnaire a week after graduation that is deployed through Survey Monkey from the NERD program. Within the questionnaire NERDs are given eleven questions, six of them are Likert based questions with optional comment fields and the other five questions are optional text comment only (Appendix F). Table 4.3 presents the results by cohort of the end of program questionnaires.

Table 4.3

NERD Response Rates by Cohort for End of Program Questionnaires

Cohort and Year	Total number of NERDs	Total number of responses	Percent of return
	n	n	%
June 2018	19	12	63%
September 2018	12	7	58%
January 2019	59	8	14%
March 2019	12	3	25%
June 2019	43	11	26%
September 2019	36	6	17%
	Overall Return Rate		32%

Questionnaires had a 32% overall return rate, which aligns with the average return rate between 30%–33% (Lindemann, 2019). Most responses to the Likert based questions were positive. Of particular interest to the researcher was question nine: Would you recommend the NERD program? Out of the 59 questionnaires answered, 47 respondents answered positively. Question nine was posed as a Net Promoter Score question. In 2003, Bain and Company introduced the Net Promoter Score which measures the percentage of customers that would likely recommend your product or service to someone they know. Scores are arranged into a three-tier system with Promoters (those who would recommend your product or service), Passives (those that are happy for now but could easily change their mind), and Detractors (those who are completely unhappy). These three elements are used to define and measure Net Promoters (*Measuring Your Net Promoter Score*, 2020). Forty-seven of the respondents were Promoters, three were Passives, three were Detractors, and the remaining three did not answer the question.

Questions one through five of the end of program questionnaire focused on the overall satisfaction of the NERD program as well as specific elements within the program. Question one stated: How satisfied are you with the NERD program? Figure 4.1 presents the results. In question one, 42 NERDs responded. Of those 83% responded favorably. Question two asked how satisfied NERDs were with the life coaching. Figure 4.2 presents the results for question two. Fifty-three NERDs responded to question two. While 67% of NERDs answered favorably, 26% were neutral in their response about their satisfaction with life coaching. Question three inquired if the NERD program prepared the NERD for success in their role. Figure 4.3 displays that of the 53 respondents, 81% replied favorably that the program did prepare them for success in the

Associate Engineer role. Question four inquired about the Host Manager who sponsored the NERD on their team for the nine-month program. Specifically, the question centered around if the Host Manager helped them grow and develop. Figure 4.4 shows that 75% of the NERDs responded positively that their Host Manager did help them grow and develop while in the program.

Each NERD was assigned a mentor on their team to provide guidance, motivation, support, and be a role model. Question five asked if the NERD's mentor helped them grow and develop. Figure 4.5 presents the results. Seventy-one percent of NERDs responded that their Mentor did help them grow and develop while in the program.

The results presented indicate that Hypothesis One: the average engagement scores of NERDs will be higher than non-NERDs by year was not supported by the data. However, the numbers did demonstrate that NERDs and non-NERDs have higher engagement scores than average US employees. The data collected and analyzed in the qualitative part of the study indicate the specific reasons the NERDs were engaged. Hypothesis Two: there is a statistically significant difference in retention between NERDs and non-NERDs by year was supported by the data. Retention numbers for NERDs were higher per year than non-NERDs. Additionally, the chi-square test demonstrated a statistically significant relationship between the NERD and non-NERD groups. Furthermore, the qualitative data reveals detailed reasons NERDs stayed with the organization.

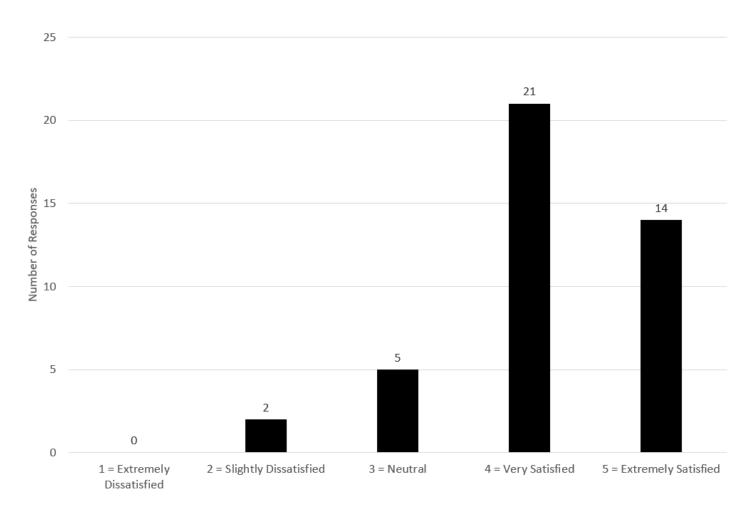


Figure 4.1. End of program questionnaire, question 1: How satisfied are you with the NERD program?

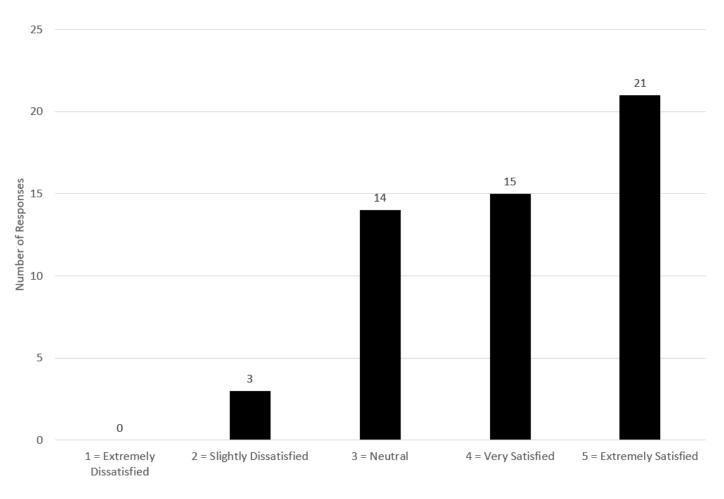


Figure 4.2. End of program questionnaire, question 2: How satisfied are you with the coaching and advice you have received from the NERD staff?

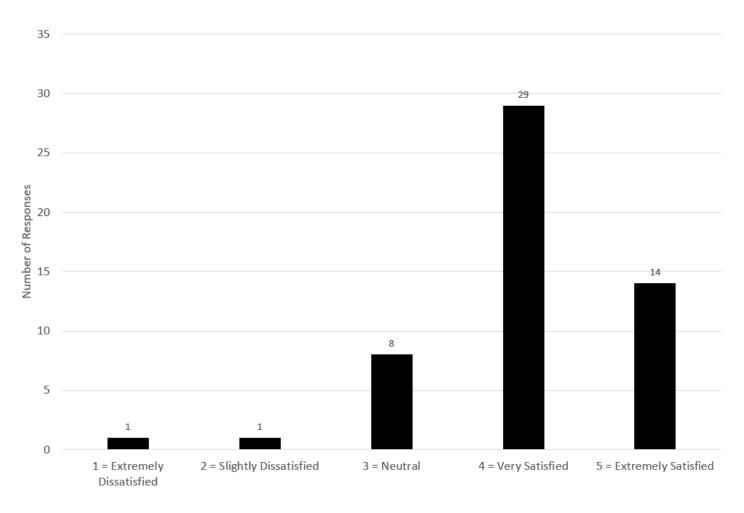


Figure 4.3. End of program questionnaire, question 3: How well did the NERD program prepare you for success?

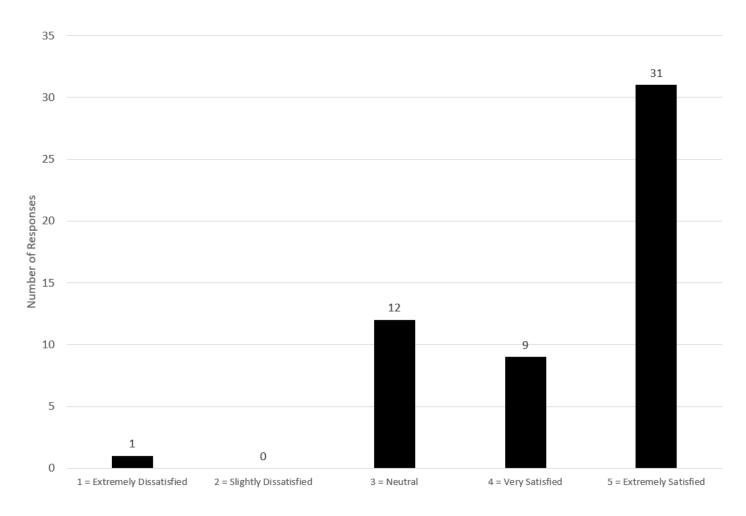


Figure 4.4. End of program questionnaire, question 4: Did your Host Manager help you grow and develop?

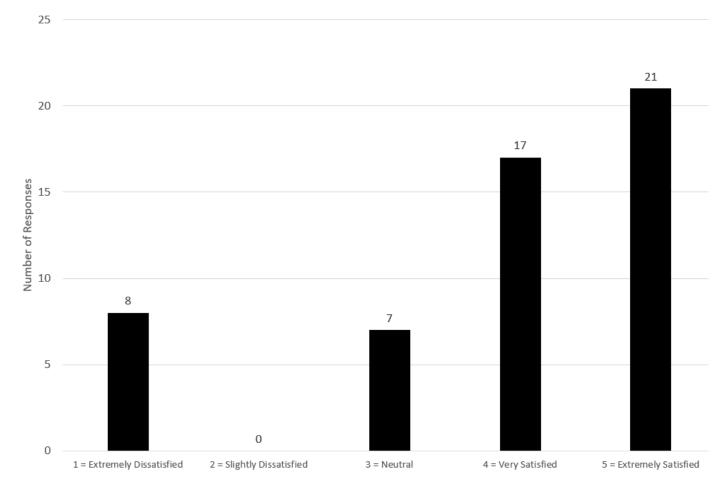


Figure 4.5. End of program questionnaire, question 5: Did your Mentor help you grow and develop?

Qualitative Data Findings

The qualitative section of this study included data from individual interviews, focus groups by cohort and year, and individual end of program questionnaires. This section contains results focused on the primary research question of how do onboarding efforts impact engagement and retention and the sub-questions about what kept NERDs engaged and influenced them to stay. Individual interviews were conducted with 77 NERDs. Nine focus groups were performed. End of program questionnaires were sent to all 184 NERDs with 59 returned, a 32% return rate. The interview protocol and interview questions are provided in Appendix D. Appendix E contains the focus group protocol and questions. Finally, an example of the end of program questionnaire is displayed in Appendix F. Data were captured and analyzed using NVivo (release 1.3).

Interview, focus group, and end of program questionnaire data was transcribed and uploaded into the NVivo system. The system created overarching code themes from all data sources for common words and sentiment. Code themes that emerged were classes, development, skills, soft skills, team, technical training, and training. A project map displays the visual representation of the themes and subthemes (Appendix G). Interestingly, the codes center on the facilitation of learning. As previously cited, employees who do not engage in learning at work are destined to leave. Training and development are one of the top items employees cite on annual employee engagement surveys (Nelson, 2018). The data shows these are the elements that impact NERD engagement and ultimately retention.

All participants were asked the same interview questions that included:

• How did your experiences in the program influence your success?

- What kind of key takeaways did you apply from the 1:1 coaching?
- How did the success skills and technical training contribute to your success? Many of the responses were similar to each question and aligned with the common themes. When asked how did your experiences in the program influence your success, many participants cited the NERD program created a support system to help them be successful. Additionally, many NERDs mentioned having a mentor on the team helped them grow and develop as individuals. As previously stated, building relationships and creating community promotes engagement (Zemke et al., 2000). Moreover, the connection created in the mentor-mentee relationship creates a sense of psychological safety for the new employee to ask questions (Bauer, 2010). Several NERDs shared what best prepared them and kept them most engaged which encompassed many of the themes. NERD 12 cited several areas that helped keep them engaged "having a mentor on the team to shadow and ask questions helped me grow so much. Having a great support system in NERD buddies, NERD coaches, and friends in the cohort helped a lot too." NERD 4 focused on their new team and environment and how the program prepared and supported them "the NERD program prepared me for what kind of work environment I would be in and was able to give me time to adjust to my team. When joining the team, I felt prepared to work, and also felt that I had support if I ever had a question or was confused." NERD 8 stated they felt the program supported them and helped them transition from school to work "I felt the NERD program was great to get acclimated to working as a new graduate and provided a great amount of support throughout the program." While each NERD had individual elements that helped their engagement, a

constant theme of the program providing support was evident. One such support element was 1:1 coaching.

The second interview question focused on what key elements NERDs applied from the 1:1 coaching. Each NERD engaged in weekly coaching sessions for the first three months of the program and then had bi-weekly sessions in months four-nine. The goal of 1:1 coaching is to help the NERDs transition from school to work and empower the NERDs to take control of their careers. Findings on 1:1 life coaching did not show as favorable as other areas on the end of program questionnaire in the quantitative section, however, there were valuable opinions expressed. NERDs shared their thoughts and feelings about the 1:1 coaching sessions. NERD 21 stated that coaching and success skills trainings contributed to their engagement "parts that kept me engaged were having 1:1 meetings with my NERD manager, along with the NERD skills trainings." General life coaching advice was valuable to NERD 54 "access to my NERD coach through 1:1s were very helpful. They gave me an opportunity to ask questions and gain understanding of corporate life in general." NERD 34 cited the coaching as their primary engagement driver "1:1 meetings with my NERD manager were what kept me most engaged." NERD 27 also cited the 1:1 meetings kept them engaged by encouraging open dialogue "I felt the 1:1s allowed me to get to know my NERD manager and I could be honest and open about my experiences. This in turn kept me engaged." Finally, NERD 6 discussed the therapeutic nature of the 1:1 meetings "the 1:1s with my NERD manager helped me the most. Being able to talk through my thoughts or problems from week to week helped me in so many ways, especially with coping with expectations vs. reality." Each NERD received a different emotional driver out of the 1:1 meetings, however a common factor

cited was the 1:1 meetings increased their personal engagement. To further the NERDs success and engagement, training was offered during the program.

The third interview question concentrated on how the success skills and technical training contributed to the NERDs success. Initial and ongoing training helps employees remain engaged and ultimately stay with an organization that invests in their development and future (Nelson, 2018). Success skill courses included soft skills subjects such as conflict management, listening and communication, emotional awareness, and feedback skills. Technical training encompassed technical skills that were used within the engineer's role. Training had the most references from the coding results. NERDs brought up several instances where training impacted their engagement. NERD 18 cited the trainings and 1:1 coaching as engagement drivers "the parts that kept me most engaged were the 1:1 meetings with my NERD manager and the NERD skills trainings." NERD 9 discussed how training prepared them "the success skills classes prepared me best. Most companies don't teach new college grads soft skills." NERD 19 called out the success skills course as being their favorite part of the program "my favorite part of the program was the life skills classes." NERD 21 cited a specific course that was helpful "the success skills courses on Emotional Awareness helped a lot. Additionally, NERD 13 cited a course they found helpful "I really liked the class on communications skills." NERDs engaged in a book study at the end of their program. NERD 6 enjoyed the book and stated, "the book study on the 7 habits helped me the most." For some NERDs it was the technical training that drove engagement. NERD 11 acknowledged "the technical trainings and certifications kept me most engaged." Additionally, NERD 29 agreed with NERD 11 "attending hands-on learning session and technical knowledge sharing sessions

was my favorite part of the program." The ongoing training served as an engagement driver for several NERDs.

The focus groups were asked questions that concentrated on engagement and reasons for retention. Each focus group could participate in free-flowing conversations and not every group completed all questions in the timeframe allotted. The questions for the focus groups included:

- What kept you most engaged in the NERD program?
- Was the NERD program training you received helpful?
- What makes you stick in the technology space?
- What other feedback do you have about the program?

Answers varied among NERDs about what kept them most engaged in the program. Some cited the NERD community created a network of new hires to socialize with and get help when questions arose. Others stated the various training opportunities and 1:1 life coaching kept them engaged. A small group discussed how the NERD program itself kept them engaged because it helped them transition from school to their first job. One NERD said the amount of support they received helped keep them continue to engage in learning and grow towards success.

When asked if the NERD program training they received was helpful, most answers were positive with a few negative exceptions. Most commented that the success skills and technical training were helpful. In a follow-up comment, one group discussed how they had applied the learnings from the success skills training in relation to their teams. Another group discussed the timings of the trainings and suggested that some of the trainings come earlier in the program to align with projects they were assigned on

their teams. The majority of the NERDS agreed that the program training opportunities helped them transition to the world of work. One focus group had NERDs with previous work experience and changed careers into an engineering role. This group found no value in the success skills courses as they stated they already knew the information from previously being in the workforce. However, they did appreciate the technical training as it helped prepare them for their role.

The conversation took an unexpected turn in the focus groups when prompted to answer the question of what makes them stick in the technology space. Many of the respondents discussed how the feeling of community and relationships kept them in the technology space. Others stated it is the continuous learning that is required of the technology space. Specifically, their job never gets old because they constantly learn new technology. The conversation took an unanticipated shift when we began to speak about females in the technology sector. The technology field is largely male dominated, as women make up less than 20% of U.S. tech positions. This number is very low considering women make up over half of the entire U.S. workforce (Bose, 2018). Catherine Ashcraft is the Director of Research and Senior Research Scientist for the National Center for Women & Information Technology. For the last twelve years, her goal has been to help women in technology. Ashcraft found three areas that impact women in technology: societal influences and biases, elementary and secondary education, and workplace systems. Society can influence how young women perceive themselves within technology. Being repeatedly told they are not as strong in STEM as boys have become a societal bias. Elementary and secondary education curriculum and teaching styles also impact how girls perceive themselves in a STEM career. Studies

show teachers call on boys more frequently in STEM classes and the exercises are more tailored to boys (Welson-Rossman, 2018). Workplace systems such as technology being male dominated and finding fewer females in leadership roles can be intimidating for females wanting to enter the tech sector (Welson-Rossman, 2018). The females in the NERD program had a very interesting lens on women in technology. They selected the sample organization because of the number of women in leadership roles in the technology organization. Seeing women in leadership roles gave them a sense of comfort of having a career path at the sample organization. This subject could have been its own focus group or a potential future study as it generated so much conversation.

Lastly, the NERDs were asked about any other feedback they had about the program. Many NERDs stated they were very happy with the program and would not change any of it. NERDs with previous work experience cited they were unaware of any similar program at other organizations. A few NERDs suggested more content within the training both in the success skills and technical tracks. Some stated they felt nine months was the perfect amount of time, while others thought it was too long. Results from the individual interviews and focus groups align with results from the end of program questionnaire.

Each NERD received an end of program questionnaire that included eleven questions after graduation from the program. Six of these questions used a five-point Likert scale (1 = Extremely Dissatisfied, 2 = Slightly Dissatisfied, 3 = Neutral, 4 = Very Satisfied, 5 = Extremely Satisfied). Five questions contained open ended responses. The Likert scale data were included in the quantitative section. The open-ended questions

revealed similar themes from each cohort. Themes that emerged from the open-ended questions centered around training and coaching.

Success skills (soft skills) training and technical training were provided for the NERD cohorts. Each NERD participated in 36 hours of success skills training and fifteen hours of technical training. NERDs cited that the skills trainings were one of the items that kept them most engaged. Specifically cited were the classes that taught communication skills and emotional awareness. One NERD stated, "good communication skills contribute heavily to a healthy company culture." Additionally, NERDs stated the classes on emotional awareness provided a great foundation for their emotional awareness and prepared them for interactions with their fellow teammates. The technical skills classes also proved very valuable to help them gain technical competency more quickly.

NERDs come out of college with a great foundation in their technical skills. The courses they take in the NERD program help to further develop and refine their skills. Technical training is focused on the technical tools and languages NERDs use in their day-to-day development work. NERDs stated the courses were very valuable and helped them come up to speed more rapidly on their team than those who did not receive the training. A few statements focused on the technical training needing to come earlier in the program. Courses are spread throughout the nine months; however, some NERDs felt the technical training should be presented first and success skills presented last in the curriculum. In addition to the training, NERDs found the 1:1 life coaching beneficial to their engagement and retention.

NERDs engaged in weekly or bi-weekly 1:1 life coaching sessions with the NERD manager. Throughout the surveys, many cited the time they spent in these sessions helped relieve their anxiety as they were able to talk about their problems and arrive at a solution. NERDs expressed that the 1:1 life coaching gave them a safe space to express themselves. Many NERDs had never been in a corporate environment before except for brief summer internships and were not sure what to expect. However, being able to talk to their NERD coach about expectations in the workplace helped them acclimate faster to the work environment. The result of the coaching engaged and retained NERDs by helping them fit in more quickly and resolve issues that could have caused a lack of engagement and eventual departure from the organization. Many of these reasons blend and form the basis of what kept NERDs engaged and why they stayed with the organization.

Mixed Method Data Findings

The convergent mixed methods approach was selected as data was collected and analyzed simultaneously. Specifically, the quantitative data assessed and validated the findings while the qualitative data further explained findings in the quantitative data. In examining the data, clear themes emerge to tell the story of NERD engagement and retention answering the question does extending onboarding impact engagement and retention. Engagement from a quantitative perspective did not have a statistically significant difference, however, NERDs demonstrate higher than the national average engagement scores. Additionally, the qualitative data describes the specific items that kept them engaged in the program from their own perspective. Retention within the quantitative data showed a statistically significant relationship between extending

onboarding and retention. Furthermore, the qualitative data elements support reasons the NERDs stayed throughout the program.

Engagement showed mixed results for the quantitative and qualitative data. While the quantitative numbers did not necessarily support that NERDs had higher engagement levels than non-NERDs, the direct qualitative statements from NERDs provide more descriptive detail. NERDS cited that the additional training, mentoring, coaching, and leaders they worked with kept them engaged. As previously discussed, these elements are key levers to engagement. The NERD curriculum offers these items throughout the program experience, items non-NERDs counterparts did not encounter. Thus, the combination of quantitative and qualitative data tells the story of engagement that stemmed from the NERD program.

Retention numbers showed positive results in both the quantitative and qualitative data. The quantitative numerical data demonstrates NERDs stay at the organization at a higher rate than non-NERDs. In addition, NERDs cite through qualitative interviews, focus groups, and end of program questionnaire data many of the specific reasons they stay. Through the NERD program, they are offered additional training to include success (soft) skills and technical training. NERDs also gain the experience of having a personal life coach to counsel them through any issues they encounter. Fullan (2011) states "one of the ways you love your employees is by creating the conditions for them to succeed" (p. 25). The NERD data demonstrates the program creates elements that help the new employees be successful in their first nine months. The quantitative and qualitative data support the premise that extending onboarding does impact retention.

Discussion

The findings of this study support previous research that onboarding is a key driver to creating an emotional bond between the team member and the organization. As a result of this bond, the team member is more engaged in their work and stays at the organization. The quantitative data did not entirely support a higher level of engagement because of the NERD program. However, the qualitative data told a descriptive story about the specific elements that kept the NERDs engaged. The quantitative data did support that retention was higher because of the NERD program. Additionally, the qualitative data expanded on the aspects of the NERD program that retained the team members.

Bauer and Erdogan (2011) compare onboarding to the concept of organizational socialization "a process through which new employees move from being organizational outsiders to becoming organizational insiders" (p. 51). Onboarding is where team members forge an emotional connection to the organization. The data is clear that the extended onboarding NERD program has an emotional impact on the NERDs. They are more socially connected with their cohort, their teams, leader, and their life coach. Ineffective onboarding can have catastrophic effects on new employees and an organization. If new employees are not trained well, it can have psychological effects on them as they repeat mistakes. Additionally, it can affect teams and the organization if the new employees continue not performing well and constantly leave the company (Caldwell & Peters, 2018). The NERD program demonstrates that an extended onboarding process can enhance the psychological well-being of employees through extended training and life coaching. Furthermore, NERDs acclimate more quickly to team assignments because of their extensive training.

Implications

This study contributes to the human resource (HR) research space informing the HR community that onboarding efforts critically impact engagement and retention. However, longer term research needs to be conducted comparing engagement scores. NERDs are new employees fresh out of college experiencing a strange new world of work for the first time. As a result, engagement scores may have been lower based on the transition of environments. A longevity study following these NERDs and their engagement scores over several years as they settle into the corporate world is needed to truly look at their engagement over several years to determine if the lower scores are attributed to the transition from school to work. Furthermore, this study could be replicated in positions at other levels beyond Associate Software Engineers or in other industries to examine if similar results occur. This study shows a clear relationship between onboarding and engagement and retention and confirms previous bodies of work that longer periods of onboarding will affect engagement and retention.

Conclusion

The literature establishes that effective onboarding is a foundation for long-term engagement and retention. Organizations know that ineffective onboarding is an issue, but there is no conclusive solution in the evidence. Engagement and retention are two target HR metrics for most organizations. Turnover causes an enormous loss of revenue on recruitment, hiring, and developing new employees. Clearly, turnover is a problem, organizations should look at effective onboarding as the answer. Engagement and retention are influenced by many aspects, primarily an individual's experiences within an organization. The research demonstrates that effective onboarding is correlated with

long-term engagement and retention. Organizations that create an emotional bond with their employees early in the process are more likely to have elevated levels of overall engagement and retention. Ultimately, this emotional connection impacts employee's productivity and they will come up to speed reaching production efficiency more rapidly (Martin, 2018). Organizations realize that improving employee engagement and retention have an impact on the company's overall financials (Smither, 2003). Specifically, engagement affects retention and connects directly to customer satisfaction and stakeholder value. Retaining top talent and keeping them engaged not only can affect the financial bottom line but also preserve institutional knowledge. Engagement and retention of talent remain one of the most essential factors to an organization's success. Extending onboarding can be a key component in an employee's individual experiences of growing in and staying with an organization.

CHAPTER FIVE

Distribution of Findings

Executive Summary

High rates of turnover remain detrimental to organizations. Turnover can have devastating effects on financial and productivity costs to businesses (Allen, 2008). The current research, literature, and data collected on the New Employee Recruitment and Development (NERD) program indicate that longer periods of onboarding affect engagement and retention of new hires. Organizations know their current state of onboarding is a problem, but there is no conclusive solution in the evidence. However, organizations that have effective onboarding programs see increases in performance, engagement, and retention (Grillo & Kim, 2015b). Additionally, employee engagement has a direct correlation to employee retention (MacIntosh & Doherty, 2010). This study examined elements of the employee lifecycle, onboarding, engagement, retention, and generational differences in the process to support the argument.

The existing research suggests that engagement and retention are influenced by numerous factors, primarily the employee's individual lived experiences. These individual lived experiences can differ based on organizational culture, leadership style, learning and growth opportunities, and career advancement. These aspects can affect how an individual connects within an organization and whether they stay with the organization. Reasons for engagement are very personal to each individual. This study highlights the importance of focusing on extending onboarding to increase long term engagement and retention.

Overview of Data Collection and Analysis Procedures

This study used the NERD program to examine the engagement and retention of those who engaged in a long-term onboarding process. Within this quasi-experimental study, results from three annual cohorts of Associate Software Engineers who participated in the NERD nine-month extended onboarding program (n = 184) were compared with those who did not (n = 261). A convergent mixed methods approach was used to look at data collected on NERDs and non-NERDs engagement and retention within the sample organization. This method was selected as both qualitative data and quantitative data were collected and analyzed simultaneously. Two hypotheses, a primary research question, two sub-questions and a mixed method question guided the study.

Hypothesis One: The average engagement scores of NERDs will be higher than non-NERDs by year.

Hypothesis Two: There is a statistically significant difference in retention between NERDs and non-NERDs by year.

Primary Research Question: How do onboarding efforts impact engagement and retention?

Sub-question One: What do NERDs say about the program that kept them most engaged?

Sub-question Two: What influences employees to stay?

Mixed Method Question: To what extent does extending onboarding impact engagement and retention of NERDs

In the convergent mixed methods approach the researcher collected and analyzed quantitative and qualitative data simultaneously on the different cohorts in the NERD program. Quantitative data included engagement numbers, retention metrics, and end of program questionnaires. Qualitative data consisted of interviews, focus groups, and openended responses from end of program questionnaires. Data were extracted from the

NEXUS system for employee engagement numbers and the HRIS system for retention numbers. A cloud-based survey system, Survey Monkey, deployed and held the end of questionnaire data. In each case, data were selected based on the job title Associate Software Engineer. The differentiator was those who participated in the NERD program and those who did not.

Quantitative data were compared using SPSS 26. Descriptive statistics compared NERD and non-NERD engagement scores. A chi–square test was conducted comparing NERD and non-NERD retention metrics. End of program questionnaire data was calculated with Microsoft Excel. Qualitative data were analyzed using NVivo. Data in the analysis included interviews, focus group information, and open-ended responses from end of program questionnaires. Interviews centered on individual engagement items. Focus groups analyzed the NERD community, and end of program questionnaires provided program feedback.

Summary of Key Findings

This study used the NERD program to examine if extending onboarding impacts long term engagement and retention. The literature is replete with studies and observations that onboarding creates an emotional connectedness between the new employee and an organization. Results indicate that extending onboarding does influence long term retention. However, engagement was slightly lower for the NERD group.

Quantitative data measured engagement and retention. Engagement data consisted of averaged data for NERDs and non-NERDs by year. Individual data metrics were not available, therefore only aggregated mean data was reported. As a result, the researcher could not determine the statistical difference between NERD and non-NERD

engagement. NERDs mean engagement score is slightly lower than non-NERDs. The mean difference is less than .05. Retention data were examined for NERDs and non-NERDs. A chi-square test showed a statistically significant relationship between NERDs and non-NERDs, $X^2(1) = 8.19$, p = .004. The effect size reveals a small effect (Phi = .14) (Field, 2018). Furthermore, the retention of the NERD group exceeded the non-NERD group ranging from 10%–45% each year. Additionally, the end of program surveys had positive results. Fifty-nine questionnaires were answered, and of those 59, 47 respondents answered positively. End of program questionnaire data demonstrates that NERDs feel the program attributed to their success.

Quantitative data derived from interviews, focus groups, and end of program questionnaires further delved into why NERDs were engaged and stayed with the organization. Through each of these data streams, two primary themes emerged that kept the NERDs engaged and with the organization: 1:1 coaching and training. NERDs consistently cited that the 1:1 coaching helped them acclimate and process any internal issues they were facing. Furthermore, they stated that the training better prepared them to be successful on their teams. Other data that emerged from the end of program questionnaire open ended items cited their mentors and host managers also highly influenced their engagement and retention.

Data on engagement showed mixed results for the quantitative and qualitative information. The quantitative data did not necessarily support that NERDs had higher engagement levels than non-NERDs, the qualitative direct statements from NERDs provided more descriptive detail on what specifically kept them engaged and with the

organization. Retention numbers demonstrated positive results in both the quantitative and qualitative data.

Informed Recommendations

The findings of this study substantiate that onboarding is a key driver of engagement and retention. The quantitative data did not exclusively confirm higher engagement because of the NERD program. Nonetheless, the qualitative data went into descriptive detail on the specific elements that kept the NERD engaged. The quantitative data did authenticate that retention was higher because of the NERD program.

Furthermore, the qualitative data confirmed the NERD program was instrumental in retaining the team members. As a result of this study, the researcher feels further investigation related to engagement is necessary. Specifically, by obtaining individual data metrics on engagement to look at statistical significance.

This study informs the body of work for the human resource community. It upholds the previous premise that effective onboarding affects engagement and retention. While further study needs to be completed using a longitudinal study, the evidence is strong that organizations should change their onboarding practices to create an emotional connectedness with their employees, thereby increasing engagement and long-term retention.

Findings Distribution Proposal

This study examined extending onboarding and its effects on long term engagement and retention. Specifically, it used the New Employee Recruitment and Development (NERD) program to examine the effects of a nine-month extended onboarding program as compared to those in the same role who did not have the benefit

of the NERD program. The study showed promising results for retention metrics; however, the engagement results did not demonstrate higher results. To further this research a longevity study to look at engagement over a significant length of time would help inform the premise that extending onboarding has long term effects on engagement and retention.

Target Audience

The target audience for this study is stakeholders who are impacted by engagement and retention. These stakeholders can include anyone in the organization that has a vested interest in their employees being highly engaged and staying at the organization. Included in this target audience are C-level executives, Human Resource professionals, Learning and Organizational Development or Change practitioners, leaders, and any others in the organization that have an interest in onboarding, engagement, and retention. All organizations want to create a connection with their employee base to enhance engagement and retention. This study can impact the administration of onboarding as a strategic driver in multiple organizational types as well as in different positions throughout an organization.

Proposed Distribution Method and Venue

This study can be shared in a variety of formats to help others understand the impact of extending onboarding to increase engagement and retention. The researcher plans on distributing the study through publications and conference presentations. Publications can include academic or human resource industry journals, as well as academic book chapters. The researcher has planned to write a book on onboarding effects on engagement and retention. Additionally, the research can be presented at

different conference types including technology, human resource, learning, and academic. This research can also be placed in competition for HR awards in learning and organizational development categories. As an example, the NERD program won an AXIS award in Change Management in 2019. To date the researcher presented at the following conferences:

- Grace Hopper Technology Conference, 2019 (Appendix H)
- Southwest Learning Summit Conference (SWLS), 2020 (Appendix I)
- Baylor Emerging Research Conference (BERC), 2021 (Appendix J)
 This study has been submitted to the following journal:
 - Impacting Education, Special Issue on EdD Student Research, 2020

Conclusion

The results of this study align with the literature that indicate longer periods of onboarding have positive effects on engagement and retention. Onboarding acclimates team members to their position and the organizational culture. Team members who participate in more effective onboarding programs develop a stronger sense of emotional connectedness with the organization by creating a commitment to the organization's success. This connection ultimately leads to longer periods of retention with the organization as a sense of loyalty develops from a committed member of the team. This study can be applied by human resource practitioners to a variety of industries as the concept of onboarding is universal. Organizations need to administer onboarding as a strategic driver to increase their engagement and retention.

APPENDICES

APPENDIX A

IRB Approval Letter



INSTITUTIONAL REVIEW BOARD - PROTECTION OF HUMAN SUBJECTS IN RESEARCH

NOTICE OF EXPEDITED APPROVAL – INITIAL REVIEW

Principal Investigator: Wendi Walker-Schmidt

Study Title: Onboarding Effects on Employee Engagement and Retention: A

Case Study Exploring Extending Onboarding and its Impact on

Long-Term Employee Engagement and Retention

IRB Reference #: 1551054

 Date of Approval:
 02/04/2020

 Status Report Due:
 02/04/2021

Expedited Category: 5 & 7

The above referenced human subjects research project has been approved by the Baylor University Institutional Review Board (IRB). Specifically, the IRB reviewed and approved the following documents:

- IRB Application submitted on 01/21/2020
- Protocol, dated 01/08/2020
- Consent Form, dated 01/23/2020
- Charles Schwab Letter of Support, dated 01/21/2020

This approval is limited to the activities described in the approved protocol and application

Any change to the approved research, must receive prior IRB approval.

For questions concerning this approval, contact the office at 254-710-3708 or IRB@Baylor.edu

Sincerely,

Deborah L. Holland, JD, MPH, CHRC, CHPC Assistant Vice Provost for Research, Research Compliance

OFFICE OF THE VICE PROVOST FOR RESEARCH | RESEARCH COMPLIANCE

Signatures have been removed for cyber security purposes and original signed documents are available upon request.

APPENDIX B

Locations and Years

Location	Month/Year
Austin, Texas	September 2017
Austin, Texas	January 2018
Austin, Texas	June 2018
Westlake, Texas	June 2018
Denver, Colorado	June 2018
San Francisco, California	June 2018
Austin, Texas	September 2018
Westlake, Texas	September 2018
Austin, Texas	January 2019
Westlake, Texas	January 2019
Denver, Colorado	January 2019
Phoenix, Arizona	January 2019
Raleigh, North Carolina	January 2019
Austin, Texas	March 2019
Westlake, Texas	March 2019
Austin, Texas	June 2019
Westlake, Texas	June 2019
Denver, Colorado	June 2019
Phoenix, Arizona	June 2019
Austin, Texas	September 2019
Westlake, Texas	September 2019
Denver, Colorado	September 2019

APPENDIX C

NEXUS Engagement Survey Questions

NEXUS ITEMS

Team

My team treats me like a valued partner.

My team helps me operate at my best.

My team is always responsive to the needs of my customers.

I am a member of one of the strongest teams in this organization.

Manager

My manager really knows me.

My successes are recognized by my manager and coworkers.

My manager does a good job coaching me to build my strengths.

Leadership has full confidence in my decisions and direction.

Individual

I know the outcomes for which I am accountable.

I know exactly how to achieve the outcomes expected of me.

My talents and abilities are fully utilized.

Every day, I clearly see the value I bring to the organization.

In the past year, I have grown professionally more than any other year.

Organization

I have full confidence in our leaders' decisions and direction.

Our leaders have painted a very compelling vision of where we are going.

The results from the previous engagement survey were discussed with me and my team.

The changes from the previous employee engagement survey resulted in positive changes.

I am extremely satisfied with this organization as a place to work.

Questions from 2017, 2018, 2019 engagement survey scored on a five-point Likert scale

(1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

APPENDIX D

Individual Interview Questions Template

NERD Name:_____

NERD Cohort:
Date:
As a participant in the NERD program:
• How did your experiences in the program influence your success?
• What kind of key takeaways did you apply from the 1:1 coaching?
The second control of the second seco
 How did the success skills and technical training contribute to your success

Site Sketch:	
Descriptive Notes:	Reflective Notes
General:	
Facial Expressions:	

Body Language:	
Saliant Points	Possible Emergent Themes:
Salient Points:	Possible Emergent Themes:

Additional interesting or illuminating information:

APPENDIX E

Cohort Focus Group Questions Template

NERD Cohort:	
NERD Cohort Location:	
Date:	
What kept you most engaged in the NERD program?	
Was the NERD program training you received helpful?	
What makes you stick in the technology space?	
What other feedback do you have about the program?	

Site Sketch:	
Descriptive Notes:	Reflective Notes
General:	
Facial Expressions:	

Body Language:	
Salient Points:	D:1-1- E
Salient Points:	Possible Emergent Themes:

Additional interesting or illuminating information:

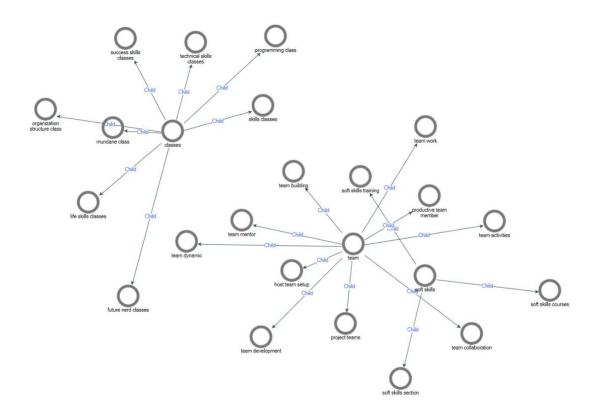
APPENDIX F

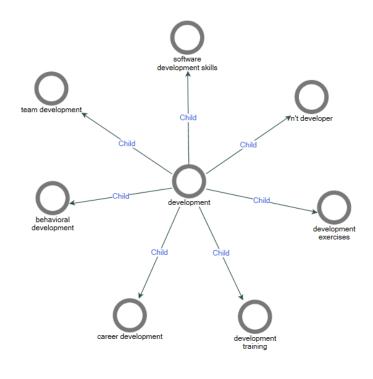
End of Program Questionnaire

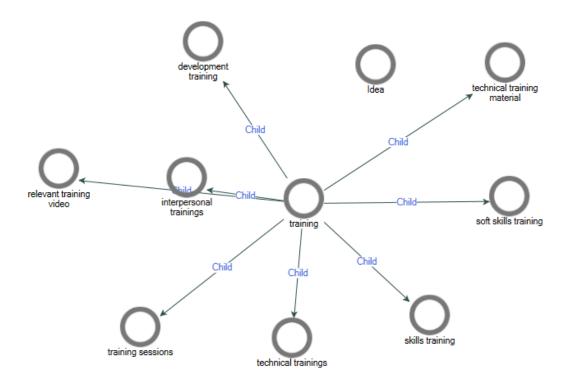
- 1. How satisfied were you with the NERD program? (1-5 ranking)
- 2. How satisfied are you with the 1:1 life coaching you received? (1-5 ranking)
- 3. How well did the NERD program prepare you for success? (1-5 ranking)
- 4. Did your host manager help you grow and develop? (1-5 ranking)
- 5. Did your mentor help you grow and develop? (1-5 ranking)
- 6. What part of the NERD program prepared you best? (open ended)
- 7. What was your favorite part of the NERD program? (open ended)
- 8. What can we do to improve the NERD program? (open ended)
- 9. Would you recommend the NERD program to others? (yes/no) (open ended comment)
- 10. What part of the NERD program kept you most engaged? (open ended)
- 11. Is there anything else you would like us to know? (open ended)

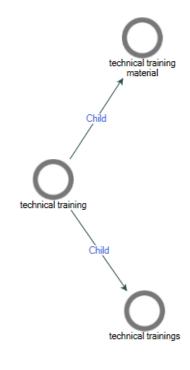
APPENDIX G

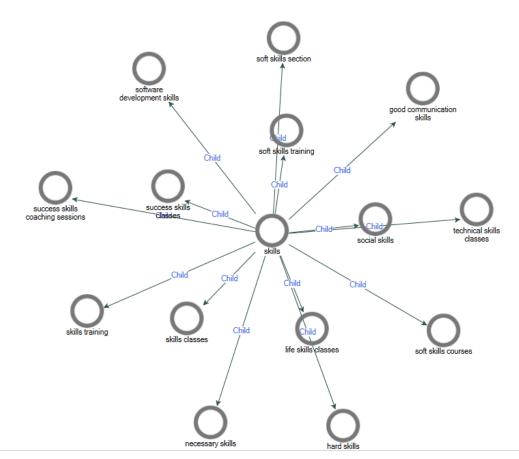
Project Map of Themes





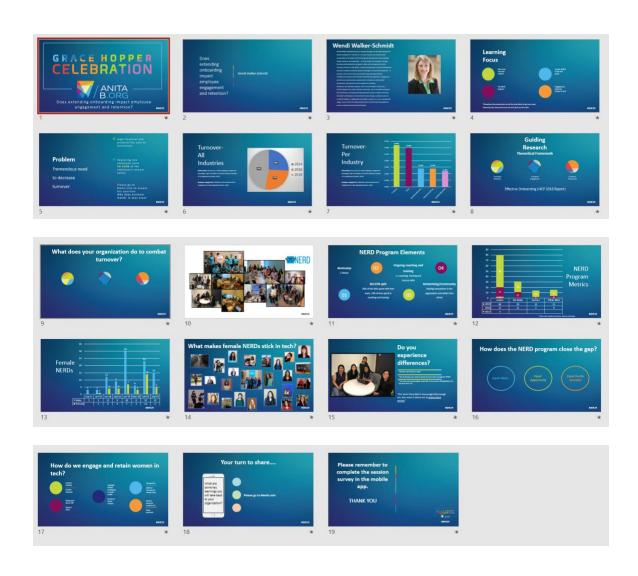






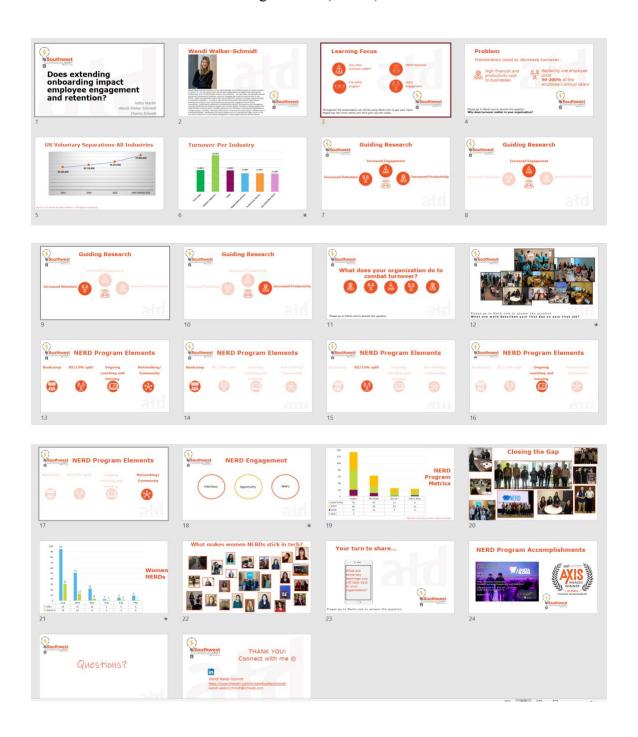
APPENDIX H

Grace Hopper 2019 Presentation



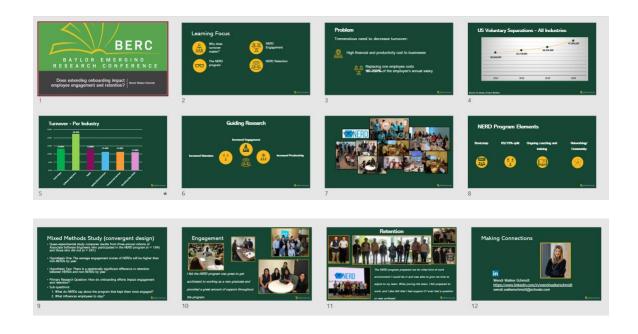
APPENDIX I

Southwest Learning Summit (SWLS) 2020 Presentation



APPENDIX J

Baylor Emerging Research Conference (BERC) 2021



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