CHECKLIST TRAINING MODEL: A COMPARISON OF TIME, INVESTMENT, AND JOB FUNCTION KNOWLEDGE

by

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Abstract

This quantitative study was an evaluation of the effectiveness of the online Training Home software program, designed for use with a national nonprofit business model. This study was undertaken because nonprofits have a difficult time resourcing training. If the Training Home program can deliver a comprehensive training program for minimal cost, then a nonprofit will be better able to deliver on the nonprofit's stated mission. For this study, six research questions centered on measuring the helpfulness of the program, the difference in job function training, improved knowledge of a national nonprofit, and perception of the Training Home program between those that had and or had not used the program. Additionally, cost per unit of training, the number of training vignettes delivered, time spent in training, ease of use by supervisors, and staff ratings of the effectiveness of the training home program. The population studied was the 450 staff at one affiliate of the national nonprofit. This staff group consisted of a mix of genders, ages, and education levels. This study used archival data gathered over the 2013, 2014, and 2015 calendar years and was analyzed using multivariate regression and descriptive analyses. The cost and number of training vignettes delivered in a 24-month period were compared to determine whether the Training Home program was a more cost-effective delivery model than the prior system for the year before the study. Analyses indicate that the Training Home program delivered more training to staff at a lower cost per unit of training when compared to the units of training delivered in the prior model. Supervisors and staff reported the program to be effective in knowledge management and tracking and the training of all staff. The study had positive results for the sample studied. It would be beneficial for any future studies to expand the sample size into other geographic regions.

Dedication

Thank you, Susan.

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I would like to acknowledge the staff at Site 1 for their help in this project and Dr. Daines for her help with the statistical analyses.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

This study explores the effectiveness and efficiency of staff training when delivered through an online distance learning modality. The importance and history of staff training summarized in the literature review of this paper explore the effect of the training on the employee's work product, whether training is important in the workplace, and if training operates differently within for-profit and nonprofit environments. Specifically, this study focuses on a program entitled Training Home, which was developed as an efficient training delivery system using the most current levels of technology available for online distance learning.

The Training Home program uses the normalization process theory (NPT), which was created by May (May et al., 2009), and the program also employs a checklist procedure. The NPT assumes that if a learning process is consistent, then the learning result will also be consistent. The Training Home program provides this type of consistent process by integrating checklists, which then support the NPT. In this way, checklists and the NPT reinforce each other in a cyclical relationship.

This research project used quantitative archival data to study Training Home, a new training model. Training Home is a software program designed to teach job functions to staff and employees via multiple delivery methods. This study is an examination of the implementation of

the Training Home program at one member affiliate of a national nonprofit and any resultant changes in employee perceptions of effectiveness during the period of study. The program implementation was done at a national nonprofit affiliate branch that was established in the 1800's and has been able to train staff effectively enough to grow and serve the community for its long history. This history is important because it demonstrates that even before the Training Home program implementation, this member affiliate branch, has thrived over a significant period of time in order to remain relevant to the local community.

This chapter serves as an introduction to the study of the Training Home program as it contextualizes the background of the problem and describes the scope of the study and the issues outlined in the study questions. Additionally, it frames the limitations of the study and introduces the research questions that guide this exploration. This chapter also describes the location of the study, introduces the theories used, and explains why those theories are relevant to the topic.

Background of the Problem

The not-for-profit sector of the United States enjoys a special tax-exempt status assigned to it within the federal tax code (Internal Revenue Service, 2016). This exempt status requires a nonprofit organization to operate in a manner that offsets some of the burdens of government (Internal Revenue Service, 2016). The problem that most nonprofits face is a lack of resources, which happens because nonprofits tend to focus more on accomplishing their organization's mission and less on acquiring financial profit (Collins, 2005; Collins, 2014). This problem with financial resources was never more evident than during the last economic recession, which began in 2008 and saw many nonprofits shutting their doors (Fine, 2018). During that time, nonprofits faced greater community needs and lost funding sources, and they subsequently had to significantly reduce training and staff development budgets to meet the needs of their mission

(Mailepors, 2009; Morreale, 2011). One of the benefits of the Training Home program is that it is specifically designed to be compatible with limited financial resources since one of the first actions a financially burdened nonprofit when it is in danger of closing takes is to reduce training dollars (Morreale, 2011); a cut in training money then has a deleterious effect on staff. Therefore, it is especially relevant to the nonprofit sector to find an efficient manner to deliver training. One of the research questions of this study is specifically targeted to study how the Training Home program can help to decrease the costs of training staff in hopes of addressing the issue of financial resources for training within nonprofits.

Training is of vital interest to both the for-profit and nonprofit business sectors. Businesses have seen higher returns and retention rates when a robust training and development program is implemented (Al-Zoubi, 2012; Jurkiewicz & Brown, 2000). The literature review shows a progression in understandings of how to train staff and the value of training (Birdi, Patterson, & Wood, 2007; Garvin, 1993). The review also indicates what aspects of training are effective and how the current level of knowledge on this topic can improve the learning experience, thereby enhancing an organization's mission or bottom line (Al-Zoubi, 2012; American Management Association, 2014; Bensen & Dundis, 2003).

It is important to understand the difference between for-profit and nonprofit business models are reviewed. Nonprofit organizations exist to relieve the burden of government and focus on a charitable purpose, as outlined by the 501(c) section of the Internal Revenue Service (IRS) code (Internal Revenue Service, 2016). For-profit organizations must pay taxes on earnings to support the government and the services the government provides for the greater good of the community as defined by the IRS code (Internal Revenue Service, 2016). The primary relevant difference between these two types of entities is the drive to return value to

shareholders in a for-profit environment versus the drive to fulfill a charitable mission in nonprofit organizations. Despite this difference and others, managers of both for-profit and nonprofit organizations can benefit from the results of this study, given that employees and volunteers in both sectors require training and orientation regarding their assigned job functions.

The following two conditions set nonprofit agencies apart from for-profit businesses: nonprofit organizations do not pay taxes and are exempt from certain sections of the tax code (Internal Revenue Service, 2016), and they have a mission that aligns with a charitable purpose to relieve the burden of government in that area. The IRS has defined governmental involvement as any activity that would otherwise fall to public services for the welfare of the community (Internal Revenue Service, 2016). For example, a nonprofit hospital may have the aim of teaching doctors while providing patient care to the public, though a for-profit hospital's bottom line is to generate profit (which, in turn, is taxed). The two hospitals are both dedicated to patient care and providing for communities, but the former distributes any surplus revenue to itself into the community it serves, and the latter distributes any surplus revenue to a few individuals in positions of influence.

In other ways, however, nonprofit and for-profit organizations mirror one another. For example, both must contain the following: strong human resources departments to recruit, train, and cooperate with staff and volunteers; finance departments to negotiate financial transactions; leadership who follow state and local regulations; and marketing staff to sell the mission, product, or services (Ben-Ner & Ren, 2015; Tahk, 2014). The main duty of the executive leadership of a nonprofit is to advance the organization's mission and promote sustainability, which is similar to how a for-profit company prioritizes the longevity of profitability to ensure shareholders receive a return on their investment (Birdi et al., 2007; Board Source, 2016). In a

nonprofit organization, the term *shareholder* is reasonably interchangeable with stakeholder, which illustrates the relationship between profit and mission (McNamara, 2016). Thus, despite the intrinsic differences between the business models, nonprofit and for-profit organizations must operate similarly to promote longevity.

Such operational similarities lead to the conclusion that an organization must have employees who know how to conduct themselves in a manner that adequately fulfills their assigned job functions in order to advance the goals and strategies of either model. Prior education and job-related training inform individuals about how to perform job functions (Salcido, 2013). To do so, organizational leaders usually outline overall responsibilities, duties, and functions as part of a specific job description and performance standards for each position. The job description and related performance standards define the criteria for job performance and expectations (Purdue University, 2011). The human resources process of defining job descriptions and performance standards applies to the hiring process within both types of organizations. The documents that define these aspects are then followed up with the required training to ensure employees fully understand their roles and duties within the organization.

Overall, a primary theme found in the literature is that nonprofit and for-profit organizations have very different motivations that affect how they deliver their training (Gandhi, 2012). However, both entities employ comparable basic business practices to meet their goals (Ben-Ner & Ren, 2015; Gandhi, 2012). Because this study focuses on training, the assumption is that both models include staff training to fulfill operational needs. For example, the review of the literature shows that that for-profits provide more training than nonprofits due largely to budgetary considerations (Manimaran, 2010). Moreover, for-profits that focus on staff training have higher market value, higher staff retention rates, and higher staff satisfaction results (Al-

Zoubi, 2012; Jurkiewicz & Brown, 2000; Manimaran, 2010), which is an important point for nonprofit organizations to note.

The overarching goal of this study is to discover whether the Training Home program is an effective tool to use in the training of staff and volunteers in a member affiliate of a national nonprofit. The national nonprofit wanted to test this program due to a large number of staff and volunteers who work in the organization. Additionally, a complicating factor for the organization is that many of the staff are seasonal employees, which requires the national nonprofit to continually train staff adequately to create a culture of safety and program excellence. Since this organization is a nonprofit, it has limited training resources and must maintain a balance between mission and financial resources (Koenig, 2016).

Training is important in any business setting and should occur in every organization for every position (Pangiotakopoulos, 2011). The level of complexity for any training should correlate to the complexity of the job functions (Brookfield, 2013). Part of this literature review focuses on training models of some for-profit organizations and analyses of the internal value of such training. Part of the purpose of the literature review is to understand the significance that for-profit companies place on training and to consider if for-profits and nonprofits both value training equally.

One training program reviewed was the director training program at the Ritz-Carlton. Before becoming a manager in the Ritz-Carlton organization, an individual must work in each department for several months. The objective of this extensive training process is to ensure that every manager understands all elements that contribute to each guest's experience (American Management Association, 2014; A. LeTourneau, personal communication, November, 2015). In fierce protection of the Ritz brand's image and reputation, the Ritz-Carlton Hotel Company

invests more than two years of training in an employee before the Ritz promotes that employee to a managerial position (A. LeTourneau, personal communication, November, 2015).

In another example, President and Chief Executive Officer Dan Cathy of Chick-fil-A, Inc. consistently update manager that have successfully run franchises for more than 20 years (D. Cathy, personal communication, October 22, 2007; Ellis: Partners in Mystery Shopping, 2014). Additionally, no individual may own more than two Chick-fil-A franchises because research by the corporation showed that an individual could only properly supervise up to two franchises while ensuring quality and successful staff training. Even if a Chick-fil-A location has high customer satisfaction and profitability, leaders still regularly train seasoned managers because training is paramount to the Chick-fil-A corporation. In contrast, the McDonald corporation does not limit franchise ownership and provides only limited training for managers and staff (P. Frankel, personal communication, January 22, 2008), and these differences in management and staff training may help explain why Chick-fil-A has a higher per-store sales average than McDonald's (Franchise Chatter, 2014; Statista, 2017). Overall, the different practices of Ritz-Carlton, Chick-fil-A, and McDonald's illustrate a range of training methods and values that exist in the for-profit community (Eaglen, Lashley, & Thomas, 2000).

Contrary to the many for-profit organizations that emphasize the importance of training, the United Way nonprofit organization spends minimal time training volunteer staff. The organization merely provides an operations binder and a few hours of face-to-face lectures for local volunteers (K. Pritchett, personal communication, February 15, 2008). However, the United Way is a very large organization that raises significant capital annually in the United States. For example, in 2012, the United Way raised $4.2 billion (American Management Association, 2014), though it still provides minimal resources for training. A similar lack of budgeting for

training is true for the national nonprofit used in this study (Birdi et al., 2007; Nonprofit HR Solutions, 2013). The national nonprofit surveyed more than 400 staff about the training provided. That survey data revealed that more than 80% reported no formal job training. Instead, staff mainly learned while on the job (Bolton, 2007). However, 100% of the national nonprofit branches where those staff members are employed reported the existence of a formal training process for front desk staff (Bolton, 2007). This discrepancy is an issue in either implementation or oversight. Since front desk staff are the primary source of information and financial transactions for patrons, the training provided to them should correspond to the importance of their assigned job responsibilities.

The issue of effective training delivery deserves research attention because of the positive effect it can have on an organization. Nonprofits strive to make communities better places to live, and they also help to support society through the mission work of replacing the burden on the government (Internal Revenue Service, 2016). If the Training Home program can provide more and better training at lower costs, then the Training Home program can improve the mission of the organizations that use it and have a positive effect on the community, the employees, and other stakeholders.

The Training Home program uses the NPT and the checklist procedure as the basis for training. The NPT assumes that a consistent set of inputs must exist to create a consistent set of outputs, and only through that process can one expect a predictable result (May et al., 2009; Onaka, 2013). The checklist procedure supports this notion in that it requires that a written checklist be used to establish a consistent set of actions around any given action. The literature shows that the use of a checklist creates a reduction in errors and adverse results in complicated systems. Organizations generally aim for consistency in their product, so according to the NPT,

they must use the consistent input to achieve that goal. This point is where the Training Home program claims to excel, as it creates a consistent input via the use of a checklist procedure. To provide background on the efficacy of checklist procedures, the literature review explains that the airline industry, military, National Aeronautics and Space Administration, nuclear plants, and the World Health Organization all have seen a reduction in incidents after implementing the use of checklist procedure (Cocklin, 2004; Federal Aviation Administration, 2014b; Hersch, 2009; Kauffman, 2013; Mars Polar Lander Team, 1999). The Training Home program also uses the checklist procedure to manage the extensive number of staff training vignettes and maximize consistency in job performance. The desired result from the implementation of Training Home is that employees report better training and a higher level of training and that the organization undertook this project with the hope of being able to report that this result is replicable within a finite budget and limited time.

Statement of the Problem

This research evaluates a new program for training. As the program is newly developed, there is no gap in the literature to relate to it directly. The research is designed to explore the efficacy of a specific type of online training, also called a *distance learning* technique. It is important to explore the most efficient use of training funds, particularly in nonprofits, which often have tight budgets (Morreale, 2011). This study examines the cost of the training and staff perceptions of Training Home before and after the implementation of the program. There exists a more general gap in the literature around distance learning and its efficacy in training employees, which this study helps to diminish. Additionally, the literature review explores the history of training and relevant advancements in technology.

The problem of the study is the effectiveness of a new training program. As shown above, in the examples of Ritz-Carlton and Chick-fil-A, for-profit organizations tend to value training and spend resources on training staff. However, research by the national nonprofit used in this study has indicated that nationally, the organization does not do a satisfactory job of training staff and volunteers (Bolton, 2007). This lack of training is significant because the national nonprofit is one of the largest nonprofit organizations in the United States (Nonprofit HR Solutions, 2013), and it only provides formal training to a handful of a key staff members, but not to the frontline employees. Results from a national survey of members of this national nonprofit show a mediocre rating for customer satisfaction, and staff job knowledge at the front desks of local affiliate branches (SEER Analytics, n.d.), which is a problem for the organization.

Since nonprofits are an organization with charitable missions, nonprofit organizations operate in a monetarily lean fashion. For example, many small, local nonprofit agencies fail to hire sufficient staff to train other employees or volunteers (Koenig, 2016; Lewis, 2016). Furthermore, by the definition of a nonprofit's role and based on IRS codification (2016), nonprofit entities fill a social service gap and must focus financial resources on the stated mission, which may partially account for the lack of training in nonprofit organizations. The *Fiscal Management Training Module* used by the research site addresses this ongoing balance between resources spent on staff versus resources spent on the fulfillment of services.

Purpose of the Study

The purpose of this study is to assess the Training Home program to determine if it could be of value to nonprofit organizations. This study was designed to explore the effectiveness of the Training Home program's use of current technology to enhance the comprehensiveness of training at a lower cost per unit. The literature review examines the value of training to

organizations, the cost of training, and the history of job training. This knowledge framework helps to determine if the cost of Training Home per training unit is beneficial as a potential investment for a nonprofit organization. Additionally, though this evaluation concerns nonprofit organizations, the literature indicates that training is much more prevalent in for-profit corporations. Nonprofits should consider the data that emerge from for-profit corporations regarding the importance of training for employee retention, employee satisfaction, customer service, and customer satisfaction (Al-Zoubi, 2012; James & Mathew, 2012).

The literature in the review shows that one of the ways in which Training Home differs from most other knowledge management programs is that it has been designed for broad distribution among multiple types of organizations and businesses rather than as a proprietary to any single organization or business model (Capterra, 2014; McIntyre, Gauvin, & Waruszynski, 2003; D. Stanley, personal communication, August 15, 2010). At the same time, the Training Home program allows the national nonprofit to provide a series of specifically tailored training types to ensure volunteers and employees perform their assigned jobs and tasks successfully, since the management team of each local affiliate can create and upload the content of each training unit. Training Home also offers a robust notification system for due dates, completion of assigned training, and updates on certifications. The system can provide or track training that includes lectures, videos, articles, links to other websites, PowerPoint lectures, quizzes, links to assigned off-site training over multiple days, and conferences. It is housed electronically in the cloud and is available to staff through any smart device or computer (M. Nellesen & G. Layer, personal communication, March 1, 2012). The Training Home program also stores training after completion so that employees and organizations have access to them for later reference. This

study was designed to measure the effectiveness of the Training Home program when used in a local affiliate of a national nonprofit organization.

Significance of the Study

Training Home was created to deliver comprehensive training to all staff at all levels of an organization in a cost-effective manner. If the cost of training is under control, and the Training Home is a viable program for doing so, then this style of the program can greatly benefit the wider nonprofit community. Because cost is a critical factor, as some nonprofits cut training due to tight budgets or limited funding (Chartered Institute for Personnel Development, 2009), this study could provide a method to counteract that factor. Also, in a European study, 33% of for-profit companies indicated that training was a luxury, not a necessity (Mailepors, 2009). However, not prioritizing training defies the previously cited research that indicates a company can increase value through training and retention.

Professionals in the nonprofit community who are responsible for mission delivery and the training of staff and volunteers may find interest in this study as well. Nonprofit managers need to be as efficient as possible in the use of their resources while delivering on the mission promise to the community that the nonprofit serves (Ben-Ner & Ren, 2015). If there is a program that can efficiently deliver employee training and mission delivery, then the nonprofit community is likely to find the Training Home program useful. The program evaluation is also important for the enhancement of the knowledge base and theories used in the study. There is value in determining if the NPT combined with a checklist procedure is effective in a distance learning program, as this information can add to the general body of knowledge about online learning and have a positive effect on future training models.

The training environment today has become more complicated due to the advent of the digital technologies and increased distance learning requirements imposed on businesses by outside agencies (Colorado Department of Education, 2013; Training Today, 2016; Travelers Insurance, 2016). In many instances, managers must consider the reality that the organization's insurance carrier, relevant governmental bodies, outside certifiers, and parent companies require employees to complete online training (Colorado Department of Education, 2013; Travelers Insurance, 2016). For example, the national human resources department of the nonprofit used in this study has reported that Philadelphia Insurance Companies requires that all drivers take a proprietary online driver's education course and obtain the Centers for Disease Control and Prevention (CDC) concussion certification (Training Today, 2016). Additionally, staff members must complete training from five different online sources: national training, member affiliate training, the CDC concussion training, specific insurance carrier training, accreditation organization training, and state or local government training. Human resources staff must track compliance from all of the sources above and certify that staff members have fulfilled the requirements set by these various entities. The benefit of the Training Home program in this regard is that it tracks and records the completion of assigned third-party training. This tracking allows human resources and risk management departments to effectively monitor employee assigned development and assigned training.

For example, fulfilling the lifeguard position at requires certifications in first aid, lifeguarding, oxygen administration, and automatic external defibrillator use. Lifeguards must also be trained in emergency procedures, customer service, cleaning, opening and closing procedures for the pool, pool chemical usage, and emergency water pump shutoff, and the knowledge for all of these processes must be kept current. If an accident occurs and a lifeguard's

certification has expired, the guard may be able to perform the necessary functions to save a drowning person, but the organization has increased liability for negligence if a staff member is allowed to work with an expired certification.

A review of federated organizations like the United Way, YMCA, YWCA, and The Boys and Girls Clubs of America, indicates that none of these national organizations use a comprehensive training model (Coker, 2009; J. Beardsley, personal communication, October 20, 2009; K. Pritchett, personal communication, February 15, 2008; K. Raglin, personal communication, June 12, 2008). Moreover, according to interviews with 22 national level executives of the nonprofit organization used in this study, the organization currently does not have a training model that is as comprehensive as the Training Home system (Bolton, 2007). The national training office has expressed interest in the results of this study to determine if the Training Home program could be adopted nationally. This interest is significant, as many other national and local nonprofit organizations train in a similarly haphazard manner using standard operating procedure manuals, traditions passed on verbally, or face-to-face mentor training, combined with some national certifications for professional staff (K. Pritchett, personal communication, February 15, 2008; K. Raglin, personal communication, June 12, 2008; A. Sweeney, personal communication, November 16, 2013). If the national nonprofit used in this study can benefit from the use of Training Home, other organizations may also benefit.

Researchers have not yet studied training models specifically for nonprofit organizations. However, the existing literature does examine the use of learning management systems, knowledge management systems, and course management systems (Capterra, 2014). Educators have often used distance learning systems based on online learning platforms. Companies that use distance learning systems have seen varied success based on the learning and supervision

culture of the company (Alshare, Freeze, Lane, & Wen, 2012). Some companies and military branches have also created in-house proprietary tracking systems (McIntyre et al., 2003; D. Stanley, personal communication, August 15, 2010). Since tracking systems are a company asset and create an advantage, researchers have not yet been allowed to study such proprietary systems. Consequently, the effectiveness of such in-house training systems is unknown outside of those operations.

A prerequisite of using a checklist procedure requires that employees perform many complicated tasks and functions at work (Weiser et al., 2010). Due to the complicated nature of such tasks, it is unreasonable to expect that an employee can remember all of the assigned job functions at all times. However, if an employee uses the checklist procedure, that employee should be able to perform complicated job functions, in the same way, every time. To illustrate this point, researchers have documented examples of the effective checklist procedure such as when flying a plane (Cocklin, 2004; Trembly, 2013), operating a nuclear plant (Yun, Han, Hong, Kwahk, & Lee, 2000), or performing surgery (O'Connor, Reddin, O'Sullivan, O'Duffy, & Keogh, 2013; Waehle, Haugen, Søfteland, & Hjälmhult, 2012). The checklist procedure states that the individual should use a checklist for thoroughness and safety and to ensure the actor misses no critical steps.

Together, these examples indicate that the use of checklists can be beneficial in professional settings. The Training Home program operates under the checklist process because it manages the list of training necessary to successfully master the functions required for each job description. The findings are expected to support the overall hypothesis that the Training Home program supports the employee and the organization in the quest for higher levels of knowledge management and distribution to all levels of staff and volunteers. Additionally, if every

employee successfully masters each function on the *checklist* of training, then they should report greater job knowledge and success in performing those job functions, which is likely to result in higher employee retention (Alshare et al., 2012; Manafi & Marinescu, 2013) and customer satisfaction (Manimaran, 2010).

As mentioned earlier, the literature shows that companies that value training also have higher economic value (Jurkiewicz & Brown, 2000; Manafi & Marinescu, 2013) and higher retention rates for staff and customers, which are two clear drivers of success (Manimaran, 2010). Profit is a lagging indicator of success, as it is a direct result of customer behavior, which is driven by factors such as retention and loyalty (Collins, 2014).

The Training Home program also incorporates the constructs of repetition and consistency, which are key components of the NPT. The main tenet of the NPT is that consistent results arise from the application of a consistent process (Nelson, 1998). For the creation of a replicable result, organizations must have an organized training process that is replicable and is consistent with the desired outcome. In this study, the Training Home program is the input process, and the desired outcome is the consistent behavior of the staff in each job description with the result of consistent work and customer service. For example, all front desk staff should be able to adequately answer questions because the Training Home program has taught them how to use the membership software, and if a staff member forgets how to accomplish a task, they can quickly refer to one of the assigned training vignettes.

Some industries that have the potential for morbidity or catastrophic outcomes (i.e., airlines, medical, and nuclear) also embrace the use of the NPT and the checklist procedure. Such use has resulted in strong overall safety records for airline agencies, hospitals, space exploration, and the U.S. nuclear industry (Boritz & Timoshenko, 2014; Bosk, Dixon-Woods,

Goeschel, & Pronovost, 2009; Chapman, Buckley, & Sheehan, 2011; National Aeronautics and Space Administration, 1986). The significance of this study is the quantification of the same application of the checklist procedure and NPT in a more commonplace setting, the national nonprofit used in this study. If the data show a statistically positive result for this one nonprofit affiliate branch's use of Training Home, then other nonprofits can apply this same methodology for better use of limited funds and thereby further their stated missions through proper training.

Research Questions

There are six research questions (RQs) and hypotheses in this study.

RQ 1: How does the reported level of helpfulness of the Training Home program vary by staff demographics?

H_0 1: The reported level of helpfulness of the Training Home does not vary by staff demographics.

H_a 1: The reported level of helpfulness of the Training Home varies by staff demographics.

RQ 2: How are levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home different between employees that have or have not been trained using the TH program?

H_0 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are not different between employees that have or have not been trained using the TH program.

H_a 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are different between employees that have or have not been trained using the TH program.

RQ 3: How does the cost for each unit of training change after the implementation of the Training Home program?

H_0 3: The cost for each unit of training does not change after the implementation of the Training Home program.

H_a 3: The cost for each unit of training changes after the implementation of the Training Home program.

RQ 4: How does time spent on training change after the implementation of the Training Home program?

H_0 4: The time spent on training does not change after the implementation of the Training Home program.

H_a 4: The time spent on training changes after the implementation of the Training Home program.

RQ 5: When using the Training Home program, how do supervisors report the ease of tracking employee training, evaluating employee training, tracking certifications, and tracking staff progress?

H_0 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is not different after the implementation of the Training Home program.

H_a 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is different.

RQ 6: What is the usage of Training Home versus informal training methods?

*H*o 6: The usage of Training Home is not different from the use of informal training methods.

H_a 6: The usage of Training Home is different than the use of informal training methods.

Definition of Terms

Age: This term is a representation of the biological age of respondents, which was asked of them in order to separate them into categories to consider possible generational differences.

Comprehensiveness of training: Individuals who took the Training Home survey Were asked to provide this subjective measurement. The question regarding comprehensiveness was designed to see if staff members who completed the training believe that the training included all aspects of the subject matter (Santos, 2012).

Cost of Unit: The unit cost is the financial expenditure for one unit of formal training as measured by the total budget divided by the number of training units delivered in one fiscal year (Wolf, Nartker, McGee, Scott, & Downer, 2017).

Ease of evaluating employee progress: This subjective measurement was asked of supervisors to determine whether the use of the Training Home program made employee evaluations easier or more difficult or if it did not affect (Kirkpatrick, 1994).

Ease of tracking certifications: Supervisors reported this subjective measurement about whether the use of the Training Home program made the tracking of employee certifications easier or more difficult, or if it had no difference (Mathai, 2017).

Ease of tracking training: Supervisors, were asked to provide this subjective measurement about whether the use of the Training Home program made it easier or more difficult to quantify the training in which the staff participated, or if it did not affect (Moran et al., 2014).

Education level: Education is the last level of school completed. This measure is used to determine whether there are any differences in the perceived efficacy of the Training Home program among staff with different levels of education (U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2009).

Employees who used Training Home: This qualification is a staff member who used the Training Home program in any manner that was intended by the organization (U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2009).

Employees who did not use Training Home: This point refers to staff who did not yet use the Training Home program in any manner during the period of study (U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2009).

Formal training methods: Formal training is defined as training that could be tracked by the date delivered, the content of the training, and who was present during the training.

How well trained are you for your job functions: This question was asked of respondents. It is a subjective self-reported estimate by the staff of how well they have been trained to perform their assigned job functions as outlined by the job description and performance standards (Brookfield, 1991).

Improved Knowledge: Respondents were asked to give a subjective and self-reported measurement of whether the Training Home program increased their knowledge about the job functions assigned to staff via the job description and performance standards (van Niekerk, Govender, Jacobs, & van As, 2017).

Informal training methods: Informal training is defined as training that cannot be proven to have occurred. Such methods include word of mouth, habit, or any other method that is not formally codified.

Knowledge management system: This system is an electronic system that captures electronic training in a retrievable manner (Geetha, Cherukulath, & Sivakumar, 2017).

Learning management system: This system is similar to a knowledge management system with the terms being interchangeable (Geetha et al., 2017).

National nonprofit: The entire group of federated organizational sites, of which Site 1 is just one location.

Site 1: The location of the member affiliate of where this study collected data.

Training: This notion refers to the agreed-upon, standard of taking an individual's skill set or knowledge to a prescribed level of proficiency (Training, n.d.).

Training Home: This is the name of the cloud-based software program that delivers training to an individual employee and is chosen for this study. Each training module is singular to the job description of the individual (M. Nellesen & G. Layer, personal communication, March 1, 2012).

Research Design

This research design is a program evaluation with a longitudinal quantitative study using training data collected from pre- and post-program implementation (Trochim, 2006; U.S. Department of Health and Human Services, 2016). This research does not test the NPT as it is used in the framing the training model. This study instead evaluates Training Home, a specific training delivery program. Secondary data were gathered from a survey designed by the creators of the program, and the survey delivered to the staff. As such, the survey was not tested before use, and the questions could not be modified for this research. Ultimately, due to the use of the survey, the more useful design for this study is statistical analyses of the responses collected from it (Trochim, 2006). Additional data were gathered and analyzed using business metrics, as

recommended by the Generally Accepted Accounting Principles guidelines (Financial Accounting Standards Board, 2015). The combination of the methods offers a clear picture of the Training Home program.

This program evaluation and longitudinal quantitative study use training data collected over three years to analyze the viability of a specifically built training model program that uses the NPT (Nelson, 1998) with a checklist procedure (O'Connor et al, 2013; Waehle et al., 2012; Weiser et al., 2010) to train employees in a nonprofit setting. In review, the NPT asserts that to ensure consistent results, a consistent process must be applied. The checklist procedure contends that to perform a complicated task, individuals need a checklist to ensure they do not make errors that fail the process. Accordingly, by combining the NPT with a checklist procedure in a single training program, it was expected that the Training Home program would produce consistent results in a complicated environment.

Assumptions and Limitations

Assumptions

This study assumes that the secondary data gathered from the national nonprofit is accurate. These data points include budgets, costs of training, survey results, and the number of training vignettes delivered during the study period. Methodologically and ontologically, the notion of accuracy refers to the assumption that the data are real and not fabricated by the organization. The dataset by itself has no value, so one can assume that there is no bias present, as evidenced by the fact that any research outcome has value when data analysis occurs.

Additionally, there is an assumption that the data tool is accurate and that the reports that were delivered by SurveyMonkey (2017) are accurate and properly state the results. Another assumption is that the SPSS 24 software provides accurate statistical results. In this study, there

are no assumptions about the replicability of the study or the representative nature of the study group. There are no assumptions made about the work of previous researchers since Training Home is a new program and as such is unevaluated.

Ontology. This study is quantitative, and as such, it assumes that there are real relationships among the units that are measured and with the statistical significance or lack thereof. In this case, the units measured are all typically used in business and are available via a human resources department or finance department. The data points used in the study include gender, age, budget, hours spent in training, and so on.

Epistemology. It is assumed that the researcher, the participants, and the data are all independent. In this study, the data are all quantitative, so the answers represent an absolute number that can be analyzed using mathematical methodologies and not subjective interpretation. Additionally, the data is secondary to the researcher, which creates independence from the subjects of the study and the research.

Axiology. For this study, the data, by their nature, do not convey value. The data represent a coding of the responses given in the secondary data. However, there is a value attached to the results in the manner that they either confirm the null hypothesis (HO) or the alternative hypothesis (HA).

Generalizations. Quantitative studies have rules that govern the use of generalizations. This study cannot be generalized to a larger member affiliate staff and site population because of the size of the study and the limited demographics. In order to be generalized; this study must be conducted in other national nonprofits with more diverse populations.

Causality. Causality concerns the cause and effect of the relationships. In this quantitative study, there is an assumption that the Training Home program directly causes an

effect on the population that uses it. The study attempts to measure the responses regarding the effect of the Training Home program on the population in the study.

Logic. In this quantitative study, there is an assumption of a logical relationship among the use of the Training Home program, the results measured by the questionnaire, and the analyses about the research questions. The data were analyzed using accepted methods, so logic indicates that the results are consistent with the intent of the statistical tools. Lastly, there is a logical assumption that results are of equal value for parties that adhere to the profit and nonprofit business model.

Limitations

Three basic limitations are noteworthy for this study. The first is the limited scope of the group surveyed (n = 226). The second point is that the data are secondary, so the survey tool has not been validated for reliability. The third limitation is about the notion that the study is solely limited to reports of the use of Training Home at one national nonprofit branch location. However, the national nonprofit organization that was used for this study has many locations around the United States. Eighty percent of households in the U.S. live within a five-mile radius of one of the member affiliates.

In this study, a quantitative methodology was used, which has certain underlying assumptions. Those assumptions include that a correct hypothesis and research questions for the material. Additionally, there is an assumption that the statistical analysis accurately reports the relationships that may or may not exist within the data points.

Some of the delimitations for this study include that the efficacy of other knowledge management systems and the use of similar programs in for-profit companies are not studied herein. There were not any further studies due to the limited scope of this study and the limited

scope of these study questions. There is no examination of the acceptance of distance learning across generations due to limited budget and time. This study also does not delve into the area of the longitudinal efficacy of distance or online learning due to a lack of time. The importance of these areas is not examined either, so there may be other delimitations that are not considered nor understood.

Organization of the Remainder of the Study

Chapter 1 has reviewed the background and purpose of this study, theories used in it, the research questions and design, assumptions, limitations, and the scope of the study. Chapter 2 provides a literature review of relevant studies and sources as they relate to training, adult learning, change management, and historical perspectives on training. Chapter 3 discusses the methodology of the study, while Chapter 4 reveals the statistical and mathematical results of the study. Lastly, Chapter 5 reviews the results from Chapter 4 and synthesizes those results with the literature review into conclusions and recommendations

CHAPTER 2. LITERATURE REVIEW

Chapter 2 delves into several areas in the literature that apply to the study of the Training Home program. This chapter discusses how the literature acquisition and research, and it continues with a review of the history of training, the progression of training models, and the use of checklists. It also details the theoretical orientation of this study. The literature review demonstrates that there is a definite value for organizations in the training of staff and volunteers (Hester, 2013).

Methods of Searching

Articles reviewed in Chapter 2 are in database searches that included Summon, Google Scholar, the Site 1 national nonprofit database, Google, Bing, PubMed, ProQuest, EBSCO, and the American Business Journal database. The keywords used in the searches were training, NPT, normalization process theory, checklist procedure, process theory, change management, history of training, training models, knowledge management, learning models, adult learning, and checklists.

Theoretical Orientation for the Study

The theoretical framework that underlies the Training Home Program comprises two elements: the NPT and its use of a checklist procedure. The NPT with a checklist procedure was selected because it appropriately encapsulates the operating tenets of the Training Home program. According to the NPT, consistent results stem from consistent input (May & Finch, 2009). The NPT is a sociological theory based on the implementation of complicated technology, innovations, and processes into existing organizations. May (2006) has studied how the individuals in an organization can consistently embed innovations into an organization through a combination of actions, education, and typical behavior (May & Finch, 2009).

In this circumstance, the checklist procedure complements the NPT by formalizing the input process into a series of steps or (re)actions designed to produce a consistent result (Gawande, 2010; May et al., 2009). In other words, a checklist creates the consistent input and behavior that the NPT requires in order to obtain the desired outcome, which is a consistent result. Currently, there is no formal checklist theory, but it is clear that checklists are a method that can consistently affect a predictable process. Therefore, checklists have been applied to implement and test the assumptions underlying the NPT. Training Home, with checklists of continually enhanced training, creates consistent employee input, which influences employee behavior and knowledge base and can then theoretically result in consistent work output (Boritz & Timoshenko, 2014). May and Finch (2009) were interested in learning how to apply the data collected in a qualitative analysis of healthcare workers and organizations (May & Finch, 2009). May and Finch (2009) have indicated that in a healthcare environment, a consistent culture of training and care resulted in replicable results and reduced mistakes; numerous other studies have also supported this idea (Panesar et al., 2011). The NPT was further examined in a separate article by May and Finch, in which they have discussed the theory and suggested that it was difficult to embed it into an operational model for an organization (May & Finch, 2009). This study uses the checklist procedure as a way to operationalize consistent input to test the assumptions of the NPT.

The use of checklists is discussed in the literature because checklists have been shown to be an effective tool. Examples of the use of successful checklist demonstrations include the work of Hersch, who has studied the use of checklists for the Apollo space programs (Hersch, 2009), and the work of (Paxton, 2008), who explored the use of checklists and how it helped the United States out-produce the Axis powers during World War II. The checklist procedure requires using

a checklist to ensure that a process is correct, which should, in turn, confirm that a task is complete and in the correct order (Rosen & Pronovost, 2014).

Review of the Literature

The first section of the literature review provides a brief history of general training through illustrating the progression of training, pedagogy styles, and adult learning, which are concepts that inspire the development of the Training Home program. The second section provides a history of the foundational contributors to adult learning theory and education. It explains how remote learning and knowledge management systems came into existence, which ultimately led to the need for, and informed the capabilities of, a program like Training Home. The third section focuses on change management; when an organization adopts a new training methodology, it is essential that there is a focus on change management (Applebaum, Habashy, Malo, & Shafiq, 2012). These disparate sections are all oriented to the components of the Training Home program and support the theoretical emphases of this study.

There is a gap in the literature around the relatively new area of distance learning, which is also known as online training or learning. It is only recently that researchers have begun to see and study the impact of this new technology (Majumdar, 2017; Stotz, Sun Lee, Rong, & Murray, 2017). This research contributes new knowledge to the area of distance and online learning via its focus on the Training Home program.

History of Training

Codified training has been found early in the human historical record. The earliest known example of codified training was from around 1792 BCE when the ancient ruler Hammurabi of Mesopotamia created a series of codes of basic tenets of law and behavior for apprentices to follow in the kingdom (Prince, 1904). This basic training model continued well into the Middle

Ages, as masters trained apprentices according to the original model that Hammurabi implemented thousands of years earlier (Snell, 2017). Apprentices learned a craft that allowed them to create a physical object, such as a home or horseshoe, or an item of practical value. In contrast, the great philosophers were interested in the creation of ideas. The training method espoused by Socrates in Athens, Greece (470 BCE – 399 BCE), Plato in Athens, Greece (428 BCE – 348 BCE), Aristotle in Stagira, Greece (in 384 BCE -347 BCE), and Lao-Tzu in China (sometime in the 6th century BCE) consists of an exchange of dialogue between two or more people (Boeree, 2009; Mark, 2012).

A review of the methods extending more than 4,000 years ago reveals that a series of learning and teaching models led to some basic methods of training; either a student was taught a skill or taught how to think critically. The first model involved training the mind to complete a physical task such as building, navigating, or fighting a battle. This training model was logical and was created based on the existing state of knowledge, levels of technology, and the limited need for goods and services at the time. The second model was intended to train the mind to think about thinking and product more profound thoughts, which helped to advance civilization by creating new knowledge and skills (Glaeser, 2009).

With the dawn of the industrial revolution in the early 1800s, the style of training changed to match the growth of manufacturing capabilities. Vestibule training (typically less than 10 trainees supervised by one experienced trainer) and factory schools were created (Sleight, 1993) because the apprentice system had become virtually obsolete, while the demand for goods increased dramatically. Individual artisans could not fulfill demand, so entrepreneurs developed factories as a way to better match demand while maximizing profits. Then, in 1913, Ford created the assembly line, in which workers who were skilled in multiple steps worked on

the line (Council for Economic Education, 2015). Soon after, World Wars I and II (WWI and WWII) created the need to change the way workers were trained in large factory settings across the world. Workers had to learn new technologies to supply the war efforts, so factory owners created the first large-scale examples of just-in-time training (JIT) and train-the-trainer programs (Paxton, 2008), which are programs that took individuals with no prior skills and taught them the requisite skills in a short period.

Ford's repetitive model of production also applied to trainers. Trainers taught workers a simple task; then, a second trainer would teach individuals the next task, and so on until a worker was fully trained (Paxton, 2008). During WWII, workers could complete a train-the-trainer course in 24 hours. This limited amount of time allowed a trainer to learn only a single task.

This 24-hour period was enough, though, as this simple method of training and production built 49,234 Sherman Tanks between 1941 and 1945 in U.S. factories, in contrast to approximately 1,900 Tiger I and II tanks built by German factories during the same period (National World War II Museum, n.d.). History has proven that the U.S. had superior training and production methods, which allowed the country to out-produce the Axis powers. Thus, the methods employed by the United States at the time became the standard for training and production in the post-WWII era (Moffat, 2016).

The National Defense Advisory Commission, also known as the Truman Committee, created *Just in Time Training* (JIT) and train-the-trainer methods to prepare U.S. industries for wartime footing (U.S. Senate, 2015). A vital component of the JIT training programs was to give a trainee a small piece of knowledge or a skill that had to be repeated proficiently (i.e., one check on a checklist of procedures to complete a task). This method persists today on assembly lines and in many training models; for instance, some individuals hold key data about finite tasks in an

area of expertise have a very narrow focus that an instructor can show to another person (Ford Manufacturing Company, 2014). The Truman Committee first proposed foundationally sound training methods, and those methods have grown through time to meet new technological breakthroughs. This success was evidenced by the 100th anniversary of the Ford assembly line in Highland Park, Michigan. Additionally, the Ford Motor Company reported that the company's assembly lines had a 30% increase in efficiency in 2014 due to the use of modern technology combined with 130,000 assembly line workers (Ford Manufacturing Company, 2014).

After the end of the world wars, the GI Bill (U.S. Military, 2019) funded education for returning soldiers and led to a more educated workforce and the advent of job support training, which meant that individual workers were given materials that contained step-by-step instructions to complete a task. The worker was expected to be educated enough to follow those instructions and ask for any necessary support from a supervisor (Magness, 2012). This evolution transferred the burden of knowledge from the organization to the worker, who was expected to become self-sufficient in the comprehension of an instruction manual (Magness, 2012).

Dr. Kirkpatrick created the Instructional System Design (ISD) evaluation model in 1956 (Kirkpatrick, 1996), and it includes task analysis, flowchart systems, and a systems approach to training evaluation, which together describe the simple task of evaluating the efficacy of training. The U.S. Air Force and American defense industry embraced the ISD approach soon after its advent in order to identify and harness the best training methods. The goal of the training systems was to eliminate piecemeal training, choose the existing systems' best attributes, and integrate them into a cohesive, efficient model (Instructional Design Central, 2012). The Kirkpatrick model has four criteria for training (Kirkpatrick, 1994): (a) Reaction – how the

trainees enjoy the program; (b) Learning – based on the reactions, what trainers have learned and what they modify in the program; (c) Behavior – whether the known best practices are used; and (d) Results – if the stated goal of the training is actually met. (Kirkpatrick, 1994). According to Kirkpatrick, when a component of training meets the four criteria, it should be integrated into an organization's overall training package (Kirkpatrick, 1994). This system of evaluation provides another example of how a checklist creates a consistent input.

While business books do not focus on training per se, they do focus on an operational attribute or leadership style of a company or industry, which provides a self-training platform. This genre began to popularize in 1982. At this time, Peters and Waterman (1982) chronicled 43 companies that were models of excellence in specific areas of industry, which was judged based on a return performance 4% higher than the *Dow Jones Industrial Average* (Clark, 2010). The authors described behaviors exhibited by companies and quantified the profits of those companies through stock valuation. This type of study had never been widely published before, and it represents the start of the business literature industry. Presently, this industry averages more than $3 billion in sales in the United States annually (Association of American Publishers, 2015).

This process continues to be relevant today, as shown by the success of similar works by Collins (2001, 2005). Collins built on the work of Peters and Waterman (1982) by describing behaviors attributed to companies that are considered successful. Collins' work (2001) sold more than 4.5 million copies (Collins, 2014). Moreover, based on the popularity of business books, many companies started book clubs at work, which required employees to read various business books and discuss their merits in a town hall fashion (Goldfield, 2011). This de facto training model resonated with many senior executives; a decision maker could require the companywide

reading of selected material and then implement a process featured in the book of choice. The revenue generated by business book sales provides evidence of the desire for actionable behaviors (Childress & Friedkin, 1977).

Today, most large companies have an electronic system for training, even if it provides just a small percentage of the total training package (Adade, 2012; Capterra, 2014). Following the computer and programming era of the 1990s, businesses have begun to create and use remote learning or training programs, learning management systems, and knowledge management systems. These remote learning methods allow an employer to use the Internet or a proprietary system to deliver training and information to staff in an organized and cost-effective manner (Darvish, Mohammadi, & Afsharpour, 2012; McIntyre et al., 2003; Santos, 2012). An employer can also update the systems that track training and administer tests to assess content uptake. Some systems provide topic-specific training, while others enable companies to customize the content. Online systems can provide consistent training across a variety of locations. For example, the military can provide training on a piece of new equipment that can be accessed from afar while it is on a remote battlefield, and the piece of equipment can be immediately used or deployed. With online training, a soldier does not have to be sent back to the United States for training at a specific base (Wolcott, Fierella, & Malone, 2013). However, the effectiveness of remote systems has not been widely studied, so it is not yet known how effective the systems are, including within the nonprofit sector.

For nonprofit organizations with a formal retention plan, a significant portion of that plan includes training (Nonprofit HR Solutions, 2013). Employee retention is critical to organizations because of institutional knowledge, relationships, and investment in employees. In one study, James and Matthew (2012) focused their research on 300 middle-level employees in the IT

sector. The researchers have found that one significant factor in determining an employee's willingness to stay at a company was the availability of learning opportunities. Staff members with a skill set that has the potential to become dated have a desire for additional training to remain relevant, which is essential for longevity and earning capacity (James & Mathew, 2012).

It is also important to note that when staff members are not kept current on new regulations, they may be forced to leave. For example, changing regulations and rules surrounding the international post-recession banking industry forced a turnover in companies that did not adequately retrain their employees (Osibanjo, Abioudun, & Kehinde, 2010). Employees may not have a choice about staying or being eliminated from a position, but the staff must have the training required to keep abreast of a changing regulatory environment; if not, or the bank will be out of compliance, and the staff will lose their jobs. Accordingly, an organization needs to create a learning and training culture or risk losing loyal employees. The ability to stay current with technology and regulations is a significant factor in employee retention today, and online remote learning programs can address and manage these training issues quickly.

Researchers have studied job satisfaction but done little to benchmark satisfaction levels across industries and jobs for common repetitive tasks (Al-Zoubi, 2012). Al-Zoubi (2012) has found employees who are highly trained and educated may be unsatisfied if they cannot use higher thought processes when doing repetitive tasks. This dissatisfaction indicates that once someone is highly trained, that individual will hope to apply that knowledge in the workplace. Al-Zoubi's study is also supported by data that show technicians, nurses, lab techs, and other professionals in jobs that relate to helping people have the highest job satisfaction (Bryner,

2007). High levels of job satisfaction could be due to the nature of the work, the ability to specialize, or the mental challenges involved (Al-Zoubi, 2012).

Latif (2012) has complemented the work of Al-Zoubi (2012) by indicating that employee training aligns with improved metrics for organizations, including improved attitudes towards the corporation. Latif's research has focused on training effectiveness and employee satisfaction through the ability to exercise discretion. Although the study was limited in the number of individuals studied, Latif found a positive correlation between training effectiveness and employee satisfaction.

Overall, training is the process of acquiring skills in a manner that meets an agreed-upon norm (Sadler-Smith, 2006). Managers must convey the purpose of the training so that employees can understand the time spent on that particular knowledge acquisition (Latif, 2012). By establishing the purpose, employees can successfully integrate new knowledge at work, which may significantly increase their satisfaction with their training and position (Latif, 2012; Sadler-Smith, 2006). Proper training, administered effectively, has had a positive effect not only on retention but on satisfaction and a willingness to accept organizational or strategic change as well (Eaglen et al., 2000). Although research has not directly addressed the Training Home model, many studies have attended to the effect training has in general on employee satisfaction.

The Relationship Between Training and Satisfaction for the Customer and Employee

White (2008) has studied the Siemens Corporation training program for its customer support division. The Siemens Corporation is a multinational corporation that manufactures electronic components, and the customer service staff is responsible for customer retention. If customer service employees are well trained, they should be able to handle any situation during *help* calls from customers. If the customer issue is successfully resolved, the customer is likely to

return, which provides the company with a market advantage. The helpline staff is among the most highly trained in-house staff at Siemens. Siemens seeks constant feedback from staff and modifies training or adds training to meet specific needs. Thus, an effective training model incorporates a feedback loop: the customer's experience and the staff's ability to meet the needs of the customer (White, 2008).

Customer service training must also be reliable in timeliness and content (White, 2008). Customer satisfaction and retention are a significant result of service quality (Manimaran, 2010). Manimaran (2010) has studied international banks to determine the banks' ability to provide customer service consistently across multiple locations. Staff members only achieved consistency when trained to operate in multiple countries and cultures with various regulatory environments. Such consistency is also an essential factor in the use of Training Home and similar models, as it helps fulfill the need for consistency as outlined in the NPT.

Customer and employee satisfaction are both individual feelings that can be transitory (Horn, 2000), which means that organizations need to be aware that most models only account for service negligence and no other aspects of service. Organizational managers need to consider that satisfaction encompasses all aspects of human senses, as well as cognitively. Satisfaction may not only stem from a human encounter, but it may also result from electronic encounters or physical presence at the place of the organization's operations (Horn, 2000). It is worth noting that there is a correlation between employee satisfaction and career development (James & Mathew, 2012). For instance, a study by Ismail, Nik Daud, and Madrah (2011) found a significant correlation between career management and job satisfaction; the relationship between the organization's capability to manage and plan career growth has a significant impact on mitigating employees' negative feelings toward the company. In other words, employees are

more forgiving of their employer if they invest in the employees' future through training (Ismail et al., 2011). This information supports the nature of the Training Home model, in which employees' job functions determine the assigned training and thus create the opportunity for career progression.

Companies that value job training experience a higher return on investment than those that did not focus on training (Molina & Ortega, 2003). Molina and Ortega (2003) indicated that firms should hire for personality traits first, and then train for needed skills. The founder of Frankel and Company, a market research firm based in Chicago, agreed with this notion (P. Frankel, personal communication, January 22, 2008). Frankel has hired employees with a specific personality type and work ethic and then trained them to function effectively in the Frankel corporate environment. Many employees were people whom Frankel thought would be compatible with the culture and could be trained to do the job, rather than those who were already skilled in market research. Because market research has a very short span of applicable relevancy, Frankel expressed the belief that the training of staff and the creativity of staff generate the actual value of the company, which in turn adds value to the employees and employee satisfaction and results in financial return to the organization (P. Frankel, personal communication, January 22, 2008; Peters, 2014).

For-profit organizations have found a correlation between profit and training (Jurkiewicz & Brown, 2000). Additionally, a significant relationship has been found between the satisfaction of employees and the satisfaction of customers (Manafi & Marinescu, 2013). For example, higher corporate resale value accrues for for-profit companies that have an educated and well-trained workforce. One study has shown that training is second in the effectiveness of staff retention strategies, behind compensation and rewards (James & Mathew, 2012). It should be

noted that in the past decade Fortune 500 companies' information technology (IT) departments had turnover rates between 25% and 35%. Such high turnover rates translate into significant costs for recruiting, delayed productivity, and increased costs of training new employees (Lawler, 2015). One explanation for the increased turnover rates is the potential lack of training to keep employees current with fast-moving technologies (Hester, 2013). Employees need to keep skill sets on par with technological advances. If a company does not provide such training, then its employees may move to those companies that do provide the relevant training support.

The ability to improve the health of organizations in the U.S. nonprofit sector is worth consideration because it is a significant source of employment; with 10.7 million employees it makes up just below 10% of the total American workforce (Nonprofit HR Solutions, 2013). Surprisingly though, only 10% of nonprofit organizations have a formal employee retention plan (Nonprofit HR Solutions, 2013). Adding to this issue is the fact that the second-best strategy for retention is staff development (Nonprofit HR Solutions, 2013). However, when surveyed about an organization's greatest retention challenge, only 5% of nonprofits cited lack of training as an issue (Nonprofit HR Solutions, 2013). This discrepancy indicates a disconnect between nonprofit retention plans, training, and actual practices.

Furthermore, most nonprofit organizations have an average annual turnover rate of 24%, whereas childcare-related nonprofits have rates that range between 100% to 300% annually (National Center for Charitable Statistics, 2013). High turnover rates mean that agencies that provide childcare have a higher need for retention plans due to the higher turnover rates. This finding is especially significant for the national nonprofit, as the organization considers childcare a core part of the program.

Since for-profit and nonprofit organizations operate in a business environment to promote long-term viability, then training should be equally important to both when viewed from the standpoints of retention, customer service, employee satisfaction, and customer satisfaction (Jurkiewicz & Brown, 2000). Moreover, nonprofits must seek a way to effectively train employees within the constraints of the organization's financial capabilities. Thus, a comprehensive training model that works within the budget constraints of a nonprofit agency would be a significant benefit to the organization. This study adds to the body of knowledge about training programs in general. The basis for the Training Home program is an implementation of the normalization process theory which has not been thoroughly examined in the literature. This research could have an impact on nonprofits' ability to maximize training with minimal financial expenses.

Overall, training methods have evolved through time to meet the changing needs of society and commensurate with the capabilities of available technologies. Training has also evolved to align with adult learning theories. The need for training continues to support an ongoing need for reliability in performance, which is supported by a consistent series of training inputs.

History of Adult Learning Theories and Teaching Models as They Relate to Training

In the prior section, which has outlined the history of training models and methods, development of methods and the refinement of mechanical training delivery models based on technological advances and societal needs have emerged. The training models and methodology explained are based on the growth of knowledge coming from adult learning theories. As an example of knowledge management systems, Training Home is a clear advancement from the vestibule training models of the Industrial Revolution. Vestibule training was simple and did not

require advanced degrees, and its efficacy did not depend on a deep understanding of employees' motivations. If someone wanted to work in the factory, the potential employee only had to learn how to work the machines; any other factors were unimportant to the trainer (Ford Manufacturing Company, 2014). Part of the success or failure of the Training Home program evaluation is examined through an understanding of current adult learning theories and workplace dynamics.

Adult learning theories could not have developed without the growing understanding of workers' needs, which parallel the hierarchical needs outlined by Maslow (1943). As shown earlier, historical training was not based on the needs of the employee, but rather the needs of production. Recent research has supported dual training needs: the needs of the employee and those of the company (Bensen & Dundis, 2003). As time has progressed from Hammurabi's early code of how to treat apprentices, social scientists have researched adult learners and educational practices to help refine training models. The first historical mention of universities and critical thinking stems from ancient times. The Chinese and Greek philosophers had one teacher who instructed several students at once. Lao-Tzu, Confucius, Plato, Aristotle, and Socrates created different ways to challenge their students to think critically. Whether from Lao-Tzu and Confucius using parables to challenge students (Mark, 2012) or Socrates using imploring questions (Boeree, 2009), society has evolved such that schools and universities are now the norms for higher education around the world. As reviewed in the history of training, the value of critical thinking is important, and an effective training model undoubtedly must include the capacity for critical thinking and not merely rote learning.

Initially, religious institutions controlled most Western adult learning, but in 1141, a scholar named Abelard began to turn away from strict scriptural teaching. Instead of asking

learners to use information and evidence from scripture to conclude the truth, Abelard espoused a doctrine that people should use their minds and data for higher-level thinking, not only merely for rote learning (Stanford University, 2013). Later, Comenius, born in Moravia in 1592, developed unique work in Sweden as an educational reformer (Comenius Foundation, 2015). As a contemporary of Galileo, Rembrandt, and Milton, Comenius was part of the Enlightenment movement in Europe, or the rise in the belief of logic, reason, and science when solving problems. Comenius espoused an educational ideology named Pansophism, in which he theorized that education, theology, and philosophy must all be taught to ensure a student is well educated. Pansophism taught the notion that education must occur throughout one's entire life and must embrace all sources of learning to be complete (McNeil, 1969). This theory connects to the modern idea of adult lifelong learning. Before this recent conceptualization, education was mainly reserved for the young during apprenticeships, and adult learning was strictly based on biblical teaching (Comenius Foundation, 2015).

Moving closer to the modern day, John Dewey worked in the United States, and in 1894, he provided a philosophy of education that is still considered one of the foundations of modern education. Dewey's ideas were progressive during a time in which dogmatic rote education was the norm, as he promoted *critical examination* of any theories and teachings necessary to understand the underpinning components (Dewey, 1897; Festenstein, 2018). Dewey's theory of education, known as functionalism, was designed to enrich students' lives and enhance their ability to learn through reflection, the study of adaptive behavior, and problem-solving. Piloting the philosophy in the 1890s at an experimental elementary school, Dewey found it successful and published more than 1,000 articles in support of his theory (Festenstein, 2018).

Building on the famous work of Pavlov (Learning Theories, 2019), Watson created behaviorism to suggest that people exhibit much the same behavior as Pavlov's dogs, as people respond with predictable behavior in certain circumstances just like the dogs (Watson, 1999). In the field of psychology, Watson asserted the importance of studying how to predict behavior and which stimuli prompt which behaviors. If such stimuli are accurately predicted, Watson theorized, that it would be easier to train people out of negative responses or train them toward more desirable one (Watson, 1999). This work has been updated by the work of Parkay and Hass (2000), who have expressed the belief that modern behavior is learned and can be unlearned by the application of appropriate rewarded responses; students work to receive positive feelings and responses, for example (Parkay & Hass, 2000). The military also uses this method during training, which is why when someone shouts *grenade*, a trained soldier knows to drop to the ground or find cover. The work of Parkay and Hass, Watson, and Pavlov thus provide essential data for any modern training system (Learning Theories, 2019).

Lindeman (1961) wrote the first book that has specifically discussed the components or process of how an adult learns. Through the hypothesis that life experience teaches adult learners more than listening to lectures, Lindeman proposed that the teacher be a guide rather than an *oracle* who bestows knowledge on the student. Adult learners are motivated to learn and thus are self-directed, and they can successfully filter all learning through personal life experiences. In agreement with Dewey, Lindeman said textbooks are not as valuable as the discussion of ideas and group interaction (Nixon-Ponder, 1995). Remote learning, through the nature of its experience, is a solitary experience and is not in accord with the work of Lindeman. A successful delivery system should consider Lindeman's ideas, such that it provides the capacity for interaction and discussion. The Training Home model takes this into account and delivers not

only rote learning material but requires employees to take personal training as well, thereby facilitating discussion and simple data transfer.

A baseline experiment of how culture affects training is currently relevant, if not recent. In 1927, Harvard Business School Professors Mayo, Rothlisberger, and Dickson experimented at the Hawthorne Plant in Cicero, Illinois (The Economist, 2008). Mayo et al. worked to identify the conditions that made workers more productive and those that otherwise influenced workers' behaviors. McCarney drew four significant conclusions (McCarney et al., 2007). The first conclusion is that the training level and aptitude of employees were not indicators of future performance, while the second conclusion is that the informal and social groups affect productivity. The authors also found that the norms of the workplace affect productivity and that any work-place has a social system.

This work was updated in 1992 when Jones found a correlation between positive singular attention and productivity (Jones, 1992). Jones has conducted a study of training in a factory setting and discovered that a group of individuals could derail a management effort because of that individual's social status in the workplace, thereby sabotaging a plan. This experiment has shown that for a new learning model to be effective in the workplace, key informal stakeholders must be engaged to help support the success of the effort. These studies have illustrated that training and human resource models applied to any workplace can be negated by the culture, thereby undermining any changes or progress that management would like to implement. Thus, all workplace training must consider workplace culture during the implementation of a new plan (Harvard Business School, 2012; Jones, 1992).

In 2010, Michele Cramer updated the work of Likert. Though Likert is most well-known for his 1932 invention of the Likert scale, his theory of the linking pin model for management is

significant to training and adult learning (House, Filley, & Gujarati, 1971). Likert has theorized that middle managers act as a link between frontline workers and management (Likert, 1932). Cramer affirmed Likert's theory that managers play dual roles in working between upper management and the groups that they supervise. Managers serve a split or linking role in that they must navigate, negotiate, and train up and down. The input of managers in a training or change model must be engaged and supportive for success, and understanding this role helps create a productive, happy, and well-trained workforce (Cramer, 2010; Sawada, 2012).

Organizations and managers at every level should take note of Maslow's hierarchy of needs, which is one of the foundational principles of psychology (McLeod, 2016). The updates of this theory by Kiel (1999), Raymond, Mittelstaedt, and Hopkins (2003), and Crawford (2016) demonstrate that many modern researchers have applied Maslow's hierarchy to current business practices. In 1943, Maslow created the well-known theory of human motivation, which describes a pyramid of a person's needs that ascend for the person to reach the level of success known as self-actualization (1943). Maslow's work is one of the pillars of humanistic psychology. At the base, the pyramid has physiological needs, followed respectively in the next levels by safety, love and belonging, esteem, and self-actualization. This hierarchy affects training and learning efforts such that higher education cannot occur unless a learner's specific basic human needs are met. For example, in a business setting, if employees are worried about being killed or sickened by unsafe conditions, then those workers are likely not paying close attention to the training they receive from their company (Boeree, 2006).

In 1956, Kirkpatrick created the ISD as a model to evaluate training, and he has updated it to match more contemporary needs (Kirkpatrick, 1994). The four components of the ISD are the individuals' reaction, learning, behavior modification, and results. This model allows for a

meaningful evaluation of any training given to a group of employees or adults. Based on this model, an instructor or trainer can consider if a student or group's training was effective and has the potential to spread throughout a company or school setting (Kirkpatrick, 1996; Kirkpatrick Partners, 2015). The work of Bloom (Bloom, Engelhart, Furst, Hill, & Krathwold, 1956), Lewin (1939), and Maslow (1943) have shown that a trainer can be most effective when following a training model that is coupled with an evaluation methodology. These building blocks create a consistent input for any comprehensive training model and delivery system, which is a pattern that falls well within the methodology of the Training Home program.

Herzberg, Mausner, and Snyderman (1959) used Maslow's (1943) work to create the two-factor theory. This theory asserts that employees are simultaneously satisfied and dissatisfied such that managers must continuously focus on both feelings to create a pleasant work environment. For example, employees may enjoy the supervision and rate of pay at work, but they may also dislike the physical work conditions. Alternatively, the conditions may be enjoyable, while the supervision and training are objectionable (Herzberg et al., 1959). This work has been updated and confirmed by Lundberg, Gudmundson, and Andersson (2009). Lundberg et al. (2009) have postulated that the two factors act independently of each other but forming in aggregate an employee's opinion about the organization, which is critical for understanding the sociological factors of any working environment. If organizational leaders understand the reasons behind workers' feelings or motivations, then they can try to minimize the negative factors for employees through training and communication combined with a consistent delivery system. It is important to note that staff turnover can mean that, eventually, a majority of staff have not heard the original message that management used to combat negative

input. It is clear that a comprehensive and continual training system must take this work, stemming from Maslow, into account.

McGregor (1960), also drawing on Maslow's (1943) work, created his theory of management in support of his concept of the theory Y management style. Dubbed theory X and theory Y, McGregor (1960) believed Maslow's lower order work applied to theory X management styles, whereas higher order managers' work applied to theory Y. The theory X management style asserts that managers must use their positional power to intimidate and cajole employees because employees are inherently lazy and do not want to work. In contrast, the management style of theory Y espouses that managers must use their positional power to work with each employee to develop an individual's full potential because employees inherently want to work, use their higher brain functions for the common good, and succeed as much as possible. Theory Y employees focus on attaining self-actualization, and theory Y management style is thus more effective for them (McGregor, 1960; Stewart, 2010).

In 2012, Faruk replicated and then updated the work of McGregor (Faruk, 2012). In Faruk's study, a group of 56 managers and 173 staff were examined to determine which management theory produced better results; again, theory Y was proven to be more effective. The X and Y theory concept is important because it helps managers and staff determine the tone of training and the style of education delivered to employees. Some factors include whether the training is uplifting or oppressive and how the management culture affects that decision. Additionally, based on the work at the Hawthorne plant (The Economist, 2008), it is clear that informal groups in the workplace can sabotage training and management styles can change efforts. It is important to note that even if management has determined that a training model is critical to the success of the company, a local manager could derail that effort. This Hawthorne

Plant effect is updated and confirmed in a 2015 study of the federal workforce (Jung & Lee, 2015).

Kirkpatrick updated his work based on ideas from Gagne (1985). In 1985, Gagne outlined the order of activities that must occur for successful instruction

1. Engage the learner's attention.
2. Set the objectives.
3. Create the ability for recall.
4. Present the subject material.
5. Show how it relates.
6. Demonstrate.
7. Give feedback.
8. Verify the learning.
9. Reinforce.
10. Give other contextual clues to enhance understanding.

Gagne's significant work was later studied by Buscombe (2013), who has provided modern instructors a basis on which to create effective lesson plans and action steps that would, in turn, create high-performing training. When coupled with the new work of Kirkpatrick (1994, 1996), Buncombe's work has afforded a source on which to base contemporary training evaluations. This work was a significant addition to the body of knowledge for instructors and educators (University of Florida, 2015) because it supplied trainers with additional tools to create and evaluate training.

Allen Tough created many books and articles on self-directed education (Tough, 2003). In his work, Tough has explained that the clear majority of adult learning takes place outside of any formalized educational setting and is based on the theory Y of management. He further believed that adult learners are self-motivated, need the flexibility to control personal schedules, and have the internal motivation to learn and enhance personal capabilities. This work is important because it was the first time that adult learners were acknowledged as being self-motivated and in need of flexibility in schedules.

Tough's work has been enhanced by the work of Rogers (1994) and Bandura (1997), which posits that adults bring experience from prior mentors and lives outside of the formalized school setting to a learning environment and experience. Specifically, Bandura's work has reinforced the concept that the adult learner is not a blank sheet and that feedback from these learners is essential, as adult students may have knowledge that can improve the quality of training in subsequent iterations. By considering the learner's existing knowledge, the organization sends a clear message that managers are listening and learning, which is a positive and respectful behavior, as outlined in theories X and Y and other kindred theories discussed earlier.

In 2010, Tullis and Benjamin conducted a study that was based on the 1968 work of Keller. Keller created a program called the personalized system of instruction (PSI) (Keller, 1968; University of Wichita, 2015), which is a series of self-paced learning modules that use a study guide to push students through the program. Tullis and Benjamin have since advanced this study by focusing on self-paced learning (Tullis & Benjamin, 2011). This learning process also applies lectures, one-on-one training, videos, audiotapes, interviews, and fieldwork, much like the Training Home program. According to the PSI, the appropriate medium for education should

be decided based on the material being taught; the best teaching method should be correlated with that subject matter. The PSI process is divided into four distinct steps: determine the subject matter, divide the subject matter into modules that are manageable for the learner, determine how the subject matter is to be tested to ensure mastery, and allow the learner to set the pace of learning (Keller, 1968). Keller's original work and the subsequent studies have shown that this is a very effective form of training. Eventually, the PSI plan met disfavor due to its high cost, resultant student procrastination, and a debate on the definition of mastering the subject matter. However, the Training Home delivery system very much reflects this work, though modern technology has helped by mitigating the high cost.

Andragogy is another theory of adult learning that approaches learning in a scholarly manner (Knowles, 1980). Knowles has stated that adult learners share four basic characteristics: self-direction, life experience, readiness to learn, and a focus on problem-solving coupled with a desire to learn. Later, Knowles acknowledged that andragogy and pedagogy are quite similar, and they mainly differ in that adults have more life experience than children. In 2007, this work was updated in a study of data from three different countries (Yoshimoto, Inenaga, & Yamada, 2007). That study examined the effectiveness of the andragogic differences among the three countries. The results are not relevant to this study, though, because the authors of the study did not change the basic premise of Knowles' work.

In 1983, Gardner put forth the theory of multiple intelligences. Before Gardner, it was widely accepted that intelligence could and should only be measured by IQ, which determines an individual's baseline intelligence. Gardner instead offered nine types of intelligence: linguistic, logical/mathematical, visual/spatial, body/kinesthetic, musical, interpersonal, intrapersonal, naturalistic, and existential (Gardner, 2011). Gardner's work offered evidence that each learner

has a unique set of capabilities that determine his or her ability to perform in many different areas. In believing that teachers or trainers consistently misunderstand or underestimate a learner's capabilities and using incomplete tools for assessment, Gardner opined that employers and schools fail to thoroughly test learners, to interview potential employees successfully, and to grasp the full potential of someone's capabilities. Gardner's work has led to the belief that society leaves much talent untapped because people are unwilling to use more tools to assess others (Gardner, 2011; Northern Illinois University, 2015). Gardner's ideas have informed instructors about factors to consider during the creation of training.

Kolb's (1984) work rests on the theories of Dewey (1897) and Lewin (1939), and Kolb (1984) declares that a learner has four basic cycles of learning: the training experience, the period of absorbing and thinking about the training content and learning experience, the consideration of the implementation of new training, and the time of acting on the training. Kolb has stated that all learners have this cycle but prefer to work mostly in one area that defines personal learning style and academic success. By developing the learning style inventory, which helps to identify the learning cycle that best fits a learner's strength, Kolb has enhanced Gardner's (2011) work. If an instructor can identify a student's prevailing learning style, then the instructor can harness that style to improve the student's skill set and match educational material to that strength (International Centre for Educators Learning Styles, 2015; Kolb, 1984). With the advent of modern technology, learning styles can be taken into account due to the diverse capabilities of modern systems.

Adding to the work of Kolb (1984) and other adult education specialists, Brookfield (1991) has presented six principles of adult education that are now widely accepted:

1. Adult learners are voluntary learners.

2. Adult learners respect one another and the instructor.
3. Adult learning is a collaboration between the instructor and the student.
4. Adult learning should include practical usage or role modeling of theories and ideas.
5. Critical thought and reflection must occur in adult learning.
6. Adult learning must be self-directed such that the learner is empowered to achieve the knowledge sought.

Brookfield's (2013) later work added significant insight to the work of previous scholars through its updates to include more contemporary ideas. Technology has advanced far enough that current electronic methods of training can take multiple learning styles and preferences into account in one program, which means that adult learners can experience some training that fits precisely with their learning style.

In 1990, Senge (1999, 2015) applied the concept of adult learning to organizations, which he called *learning organizations*. Senge was the first scholar to reflect on the organizations themselves rather than the individuals. The author has provided a roadmap to understanding what institutional knowledge could and should mean for an organization and how an institution can internally create the ability to act on that institutional knowledge. Organizations today can analyze current and future needs by using the methods and actions that Senge proposed. The five disciplines of Senge's learning organization are system thinking, personal mastery, mental models, shared vision, and team learning. Senge (1999) was a pioneer in considering how a corporate culture could adapt to create an environment in which learning and change could flourish. Interestingly, this personification of a corporation led to debates about the rights of corporations versus individuals (Senge, 2015).

Nonaka and Takeuchi (1995) have continued the development of Senge's concept that an organization can create an environment to promote the creation of knowledge and ideas. The researchers have theorized that there are four necessary steps for creating a continuous cycle of knowledge creation: externalization, internalization, combination, and socialization. If the steps of this process are ongoing, then the organization should develop a continuous creative cycle of learning and knowledge acquisition (Nonaka & Takeuchi, 1995). The concept of a learning company is critical to the application of a program like Training Home: if a company does not desire to be a learning organization, it cannot successfully adopt a comprehensive training model.

Overall, modern adult learning theories began from a discussion of Abelard's (Stanford University, 2013) rejection of religious institution dicta, thereby allowing social scientists to consider other avenues of thinking. Scholars progressed to considering the best ways to teach adults and children. Scholasticism (Uzgalis, 2019) broke from the popular dogmatic methodology, which led to the work by Locke (1824), who believed the environment drives knowledge of how learners experience the world. Theorists that followed Locke have believed not just in ideas but in the combination of ethics and the environment to educate and inform people about the world. This evolution led to a natural outgrowth of the work of Dewey (1897), who wanted to examine the world critically and use data as a foundation for learning (Dewey, 1897).

Theories have transitioned from suggesting that students learn only what is dictated to them, to an understanding that they should gather and then interpret data. Social scientists have examined the path that Pavlov and Watson (Learning Theories, 2019) considered: the predictability of human behavior and how humans could be better prepared to learn. An era

followed in which social scientists identified how adults learn best, which has been accomplished through environmental studies like Roethlisberger's (The Economist, 2008) or through examining a worker's satisfaction regarding personal physical needs; these channels allow adult learners to focus on learning, which follows Maslow (1943).

This cycle condensed in modern times with the taxonomy of Bloom (Bloom et al., 1956), Kirkpatrick's (1994, 1996) levels, and McGregor's (1960) theory of X and Y. Today's conceptualization of how to successfully administer remote education incorporate this knowledge and progress, and they have lent to the creation of remote learning and other knowledge management systems like the one studied in this project. Training Home is self-paced, allows critical thinking, considers theory Y, allows for evaluation, can be used in a comfortable environment, and uses a multidimensional approach to instruction that satisfies different needs for individual learning models.

Change Management

The Training Home program is not inherently a change management program. Rather, it provides a method to uniquely deliver training to individuals who can help to facilitate change in an organization. An upgrade in organizational training does not explicitly call for a change management regimen, but it may need one depending on what the training is or if the organization is significantly changing the stated mission. Therefore, organizations seeking to make a substantial cultural shift should understand the literature around change management. What follows is a brief look at the current standing of change management in the extant literature.

Organizations that seek change must experience a change process. In addition to changing an embedded culture, organization members must see the need for change and a reason

to change. Usually, an organization must reach a critical state to want to change, much like an addict (Collins, 2014; Kotter, 1995).

For example, a study of the Ford Trade School at the Rouge Plant, Dearborn, Michigan uncovered the significant role that culture plays in the workplace (Ford Manufacturing Company, 2014). To use any program that is new and vastly different from the current operations, managers must understand how to implement change in an embedded culture.

Kotter (1995) created the original theory around change management when he discussed why companies often fail when implementing adaptation efforts. Kotter has loosely defined change management as the transformational process of a company from one mode or style of operation to another. For companies to remain relevant, they must learn how to innovate, and spread innovation throughout the entire culture of the company in a multiyear process. Kotter's theory was studied again in 2012 by Applebaum et al. (2012). According to this work, organizational leaders must understand that change does not arise easily. Instead, leaders must seek out change management in order to create a culture that facilitates a successful transition. However, attempts to create cultural change may ultimately fail despite leaders' best intentions, so Kotter (1995) proposed eight important steps for change management. These steps include the creation of a sense of immediacy, a group to advocate for the change, clear articulation of the change, communication with all key stakeholders about the plan and goals, elimination of threats to the change, immediate achievement of success, recognition and celebration of when the change is complete, and the assurance that the organization makes the change permanent.

Appelbaum et al. (2012) have reviewed the body of recent literature and found support for Kotter's foundational eight steps. However, Appelbaum et al. offered an addendum that

indicates that much of the theory's success was based on the clarity of the steps and ease of use as opposed to the scientific nature of the research (Applebaum et al., 2012).

Strebel (1996) has theorized that employees will resist changes within the workplace, but that can be ameliorated by creating a relationship between the company and the employees. If both the company and employees feel committed to one another then change is easier (Strebel, 1996). A formal compact appears in job descriptions, while a psychological compact appears in how employees feel at work, and a social compact rest on the values and rules of the organization. If managers can address the compacts while trying to create a change in the work environment, the change is likely to be more effective (Strebel, 1996).

Much of the work by Appelbaum et al. (2012), Strebel (1996), and Kotter (1995) about change management has centered on emotional issues of change and growth in companies: how employees feel about change, how to persuade staff to change, and the culture of change. In their study of more than 200 companies experiencing a major change, consultants Sirkin, Keenan, and Jackson (2005) have found that companies that underwent successful change held a shared philosophy that considered the feelings of their employees. Sirkin et al. (2005) have proposed four tactics to garner successful cultural change, which is called the DICE program: understanding the *duration* of the change, ensuring the *integrity* of the performance of teams involved in the change, ensuring all leaders are *committed* to the change to mitigate sabotage, and defining the extra *effort* staff need during the change (Sirkin et al., 2005). The components of DICE, which have now been studied in more than 1,000 additional change programs, have continued to yield success for all subsequent companies. This disciplined approach, when combined with the emotional issues described in Likert's linking pin theory and the Hawthorne Plant studies, forms a complete change package (Sirkin et al., 2005). By linking the DICE

method to the work of Strebel (1996) and connecting Appelbaum et al.'s (2012) change management model to training, an educated workforce with all emotional needs met can be created to ensure the details comply with a transformational process like the implementation of Training Home.

A 2013 study of the operations and caseload of a child welfare agency in the United States has called for a new model of leadership necessary to lead all similar agencies into the future (Bernotavicz, McDaniel, Brittain, & Dickinson, 2013). The study authors have offered examples of how to enact positive change in the delivery model of those agencies, such as allowing case managers to have a voice in the implementation of the delivery system. The breadth and diversity of services offered by child welfare agencies match those of many large corporations. This study is thus applicable to both large corporations and other nongovernmental organizations in that it has outlined the necessity for change management plans and explained ways to involve all levels of employees in significant change.

A similar study by Patel, Schmid, and Hochfield (2012) has considered how South African social services agencies implemented organizational changes to allow for integration following the fall of apartheid. This study's authors have considered whether the changes were based on politics or represented foundational changes that would persist over multiple political administrations (Patel et al., 2012). Both studies have found that middle managers significantly hindered change and had not followed the steps that Kotter has (1995) outlined; the organizations also did not meet the emotional needs of the managers or provide enough data and specificity to overcome some key stakeholder objections. According to the literature, a different training model delivered throughout the organization and following the best practices for change will overcome these obstacles. Findings from the two studies demonstrate how middle management

can sabotage a change effort and provide clear examples as to why the implementation of a program like Training Home should be monitored at all levels.

Blackwell, Trzesniewski, and Dweck (2007) discusses the need for learners to be motivated. This longitudinal study explores the opposing theories of whether intelligence is either fixed or malleable. Ultimately, the study has concluded that intelligence is based more on the motivation to learn than a static condition. Molina and Ortega (2003) have discussed the value proposition of training to a company by comparing valuations on the open market of companies that value training. The study demonstrates that training could positively change a company's direction and overall profitability (Molina & Ortega, 2003). Jimmieson and White (2011) have examined employee intentions around change management with consideration for how a change management process can assist employees in accepting change. The three articles have examined Kotter's (1995) work from the viewpoint of the organization and employees while building on the work of Sirkin et al. (2005) and Strebel (1996). The authors have all provided a complete package of change management understandings and explained the relationship between change management and training.

A study based on Gardner's earlier theory of individuals' many different attributes and unique capabilities (Northern Illinois University, 2015) has highlighted that a change management process should also consider the uniqueness of organizations, the leaders, and the employees. Fitch and Jagolino (2012) have applied complexity theory and system dynamics modeling to consider this complexity by studying an early childhood intervention program across the United States. Their results have indicated that an application of system dynamics modeling could help reveal how to integrate change management into a complex system. An organization

can customize training to meet the complexity of the system while applying the work of Kotter (1995) and those who followed.

A 2013 study of palliative care agencies in California echoed this theme of complicated systems in need of change (Otis-Green, Yang, & Lynne, 2013). The National Cancer Institute provided support through change management training and seminars at the caregiver level to help effect a needed change in institutions. Ultimately, the model of selecting key caregivers and actively supporting through the training program was proven to be useful in creating organizational change.

In conclusion, Appelbaum et al.'s (2012) work conclude that a process must occur for successful sustained change to occur. Strebel (1996) has shown that the emotional and psychological elements of change cannot be ignored, while Sirkin et al. (2005) have refined Kotter's and Strebel's work into specific actions that stop the process from derailing. Lastly, Fitch and Jagolino (2012) have employed a fluid dynamics complexity model to apply earlier change management work to complex systems. This model suggests that successful change can occur by merely following an outlined process. Consequently, even the simple act of training staff on the stages of impending change can create the desired outcome. The process of change management, therefore, cannot occur without training at all levels. Managers or organizational leaders must understand this link between training and change to be successful in organizational transformations.

Learning Organizations

The final section of the literature review centers around the understanding of learning organizations and how they create an environment in which a new program like Training Home is introduced successfully, and then the data from the study is interpreted properly. The Business

Dictionary (Learning Organization, n.d.) has defined a learning organization as one that rapidly acquires knowledge while innovating in a manner that promotes survival during turbulent times. A learning organization has four basic attributes: (a) it creates an encouraging culture that supports learning; (b) it encourages critical thinking and risk-taking via new ideas, and it does not punish mistakes but values employee contributions; (c) it learns from mistakes and implements experimentation; and (d) it disseminates new information across the organization to be used in daily operations (Berkowitz, Bowen, Benbenishty, & Powers, 2013; Garvin, 1993). This concept is also essential for this study of Training Home in that a learning organization has to teach and train; an organization must train because it has to be open to current world trends to stay competitive, which is a goal that requires training and education. Training and education is the hallmark of the Training Home program.

Additional studies have supported the history of adult learning by touching on learning organizations. Garvin (1993) of the Harvard Business School has professed three basic elements to creating a learning organization:

1. Focus on a clear mission.
2. Provide consistent management that sets clear goals.
3. Create the ability to measure key indicators that represent progress toward the goals.

Additionally, learning organizations share the same thirst for benchmarking, experimenting, rigorous testing, knowledge transfer, and the ability to spread knowledge through the business quickly and comprehensively. If all of the factors are in place, the organization can become a learning organization. This work was furthered by Shin, Picken, and Dess (2017), who have found that companies must adjust to the new capabilities of communication and data transfer or they will suffer. The work of Shin et al. (2017) has averred that the best-performing

new companies had little infrastructure and instead relied on technology. This rapid change from infrastructure to technology dominance means that learning organizations require much more rigor if they wish to take advantage of new technological capabilities.

A more recent study has built on Garvin's (1993) work. This study in Israel has considered the *School Success Profile Learning Organization*, an organization with a process that uses an assessment tool developed from the work of Garvin and others (Berkowitz et al., 2013). The study demonstrated that there was a relationship between schools that used data and the proposed process to create an environment that could learn were successful when they also used data developed internally. Another 2013 study concludes that organizations could learn spontaneously, much like people, from other organizations. This notion has been evidenced by studying the genesis of change in different organizations (Halamachi & Woron, 2013). This correlation means that organizations can have institutional memory, like individuals, and can modify behavior based on what has occurred in kindred organizations.

In an earlier study, Quinn, Anderson, and Finklestein (1996) have argued that for a company to thrive in a turbulent economy, it must be able to (a) nurture and promote professional intellect, (b) innovate, and (c) make quick changes. The authors also found that if a company cannot properly train staff, then that company can likely never take full advantage of the staff's ability to add to the organization's capacity and ability to learn. The most successful company can rapidly exploit new thoughts and technologies by disseminating information quickly (Quinn et al., 1996).

Shin et al. (2017) have argued that once an organization inculcates a culture of learning, it can drive the functionality of training itself. A learning organization creates a culture of learning and innovation. As evidenced by many of the studies, this culture can only occur if the

creative side of the equation is being fed by new ideas and training in addition to foundational steps. The goal of learning organizations is to create change through knowledge acquisition, and this goal is facilitated by the use of a program like Training Home coupled with an intense desire for change from management.

Checklist Procedure

The Training Home program uses the checklist procedure, which is so prevalent that most adults are familiar with its basic tenets. The checklist procedure states that to perform a complicated task, people need a checklist to ensure that there are not any omissions or errors that result in the failure of the process (Weiser et al., 2010). The following studies have indicated there is value in the use of the checklist procedure and how to use it in a training program.

The military has long used checklists in training. A straightforward example is the use of a hand grenade checklist: (a) hold the grenade, (b) pull the pin, (c) count to three, (d) throw the grenade, (e) find cover (McIntyre et al., 2003); the Training Home program uses a similar checklist process. Organizations are complex and need to find a path through the chaos of change, new ideas, and technological updates (Fitch & Jagolino, 2012; Kotter, 1995); the basic idea of the checklist is to create order from chaos, and it has been shown to be a reliable tool.

The medical field has recently begun to encourage the use of checklists. In 2009, Roszell (2009) studied the issue of informed consent, the use of checklists, and how both impact hospital discharges. His study demonstrates that the Department of Health and Human Services ruled that hospital discharge checklists were so important that their use could not be considered research and did not fall under Health Insurance Portability and Accountability Act constraints. Another medical example of checklist use is by Rowe (2012). Out of 2.5 million admissions to hospitals in Canada, 185,000 aligned with an *adverse event* that would have been preventable if the

recommended checklist had been used. Rowe has thus called for wider use of the checklist procedure in the medical community because of this study. Trembly (2013) has advocated for the use of a more comprehensive hospital discharge checklist in the United States as the result of a study that has indicated that there would be a lower patient return rate by adding social services and communications plans to the checklists.

The World Health Organization (WHO) wanted the worldwide medical community to begin using a comprehensive checklist in surgery (Panesar et al., 2011). A study has found that consistent use of a checklist in orthopedic surgery reduced cases of patient safety issues by an astounding 21.1% (Panesar et al., 2011). In further support of the use of medical checklists, an article in the medical journal *The Lancet* has supported the use of the checklist procedure, but only when used in a feedback loop that allows for continual improvement of the checklist itself (Bosk et al., 2009).

The medical industry may call for the use of checklists, but not every surgeon or anesthesiologist is supportive of the idea. An article in the *British Journal of Anesthesia* advocated parallel safety development in the surgical suite that mirrored what occurred in the aviation industry. The call for safety development followed a survey of anesthesiologists who did not support the use of checklists in the surgical suites (Toff, 2010; Weiser et al., 2010). Toff (2010) has argued that the aviation industry has consistently improved the safety record of aviation during the previous 100 years by the increased use of systematic checklists in all areas of training, maintenance, and flight procedures. The data supported the argument that the surgical field would benefit from a checklist process, despite the resistance from anesthesiologists (Toff, 2010). In a complementary study, the 2010 work of Gawande indicates that medical knowledge has become so vast that no single person can remember all possible

variables. Consequently, the use of checklists has become necessary to ensure patient safety (Gawande, 2010).

While the military uses checklists as part of the training regimen (McIntyre et al., 2003) and the medical industry has been moving in the same direction (Weiser et al., 2010), aviation has made checklist procedure a definitive part of aviation training culture. The airplane checklist is probably the most widely known application of checklists in U.S. society. When an audience watches an airplane emergency in films, the flight crew takes out a checklist and begins to solve the problem; checklists are used for takeoff and landing. The checklist procedure is such a typical application and accepted norm that there is a dearth of current studies that reference the use of checklists. However, a 2004 article suggests that would be value in more research into the use of checklists for emergency situations (Cocklin, 2004) because the airline industry has proven checklists so valuable in preventing accidents (Cocklin, 2004).

An article in the journal *Safety Science* reported an increased need for the use of the checklist in the design and use of nuclear power plants (Jou et al., 2009). The International Atomic Energy Agency (2001) has issued specific guidelines for the creation of checklists for inspections and the use of checklists during emergencies. According to the 2004 report, this agency has worked to create a culture of consistent safety and consistent reactions during an emergency situation. Kauffman (2013) has created a list of the differences between the Japanese nuclear industry and the U.S. nuclear industry, which demonstrates the fact that U.S. plants act autonomously during an emergency, using onsite checklists and procedures to contain accidents. In contrast, Japanese plants must confer with the government during an emergency (Kauffman, 2013). The heightened autonomy of the U.S. safety culture, onsite decision-making, and the use

of emergency procedure checklists would likely have stopped the meltdown that occurred in the Fukushima reactors (Kauffman, 2013).

Synthesis of Research Findings

The research findings for the theoretical orientation are well documented and not surprising. This study uses the NPT (May et al., 2009), which, as discussed earlier, pulls together research from companies that have integrated significant change or new technology into their operations. May and his associates have studied the staff (actors or agents), the procedures of the companies, and the context or work of the companies. These three factors form the basis of what the institutions in May's study found to be critical to ensure consistent success (May & Finch, 2009). It is important to note that this is a theory that is not shocking or surprising. It makes logical sense, as the NPT posits that if an organization or process desires a consistent result, then there must be a consistent set of inputs or actions at the outset that is designed to move the sequence of events towards the desired outcome.

The theory by May and Finch (2009) closely intertwines with the checklist procedure. No theory in the literature directly unravels the use of checklists, but there is a significant amount of research surrounding the value of the use of checklists to reach the desired outcome, as described above. This idea loops back to the fact that reaching the desired outcome consistently is intertwined with the basic definition of the NPT.

Checklist procedures have appeared most recently in the medical field. European countries use checklists more than North American ones (Grigg, 2015), and the Europeans have found checklists to be useful in reducing errors and lowering readmittance rates to hospitals. There is also a significant body of work on the use of checklists in the aviation industry. Though checklists are used extensively in aviation, one article has called for greater use of checklists in

emergencies aboard aircraft (Federal Aviation Administration, 2014a). Lastly, checklists are significantly used in the military to ensure competency in all of the complicated weapons systems.

The literature review has also delved into a history of training to help better understand how professional training has progressed over the ages. The first recorded examples of training were from 1792 BCE (Prince, 1904) when Hammurabi created a code for the treatment of apprentices. Today, we have now progressed to distance learning via computers (Santos, 2012). What is clear in the literature is that three major factors have influenced significant leaps forward in training methodology. The first factor was the Industrial Revolution, the second factor was the technology created during both World Wars, and the third factor was advancements in technology. The three factors have combined to create significant progress in training methods.

The history of training and adult learning models is intertwined. Some of the peer-reviewed articles have discussed adult learning and the history of training in the same studies (Sleight, 1993). However, the articles are included in this study to show that the Training Home program was based on the natural progression of the state of training as currently understood.

Learning organizations and change management are addressed as part of this program review. The research literature explores learning organizations and change management because both factors can influence the implementation and success of the Training Home program. A learning organization, as defined in the literature, has a desire and mandate to continually evolve by embracing new technology and ideas (Shin et al., 2017). Learning organizations are the type of organization to which Training Home and distance learning models may appeal. One of the main tenants of a learning organization is the ability to implement a change when needed, so it is logical that understanding the impact of the Training Home program hinges on the

understanding of change management. Change management was popularized by Kotter and his eight steps to create successful change in an organization (Kotter, 1995). Studies that have built on Kotter's work have confirmed and refined Kotter's change models and studied why employees resist change (Strebel, 1996).

Critique of Previous Research Methods

Many of the studies in the literature review are foundational in nature and have been supplemented over the years, such as the Hawthorne Plant study (Jung & Lee, 2015), the two factor theory by Herzberg (Lundberg et al., 2009), and the X and Y theory of management (Faruk, 2012). The X and Y theory is a topic in basic business or sociology classes, and the initial work is shown to be flawed, though the idea was foundational in creating the current understanding of organizations. The studies have described how training has evolved. There has been a logical progression of learning models and training as shown in the literature review and linking the studies to one another. The goal of presenting the studies in the literature review is to illustrate the logical progression of training models and methods. This evolution also supports the idea that Training Home is a logical next step in that progression and has used realistic progenitors for its development.

The key studies for review in this section are related to the NPT by May et al. (2003). The NPT first appeared in the literature in 2003 as studies normalization process procedure, in which May et al. (2003) studied the process of embedding new ideas and technology into companies. However, according to May, his work was not complete because it did not explain how normalization occurred (May et al., 2003; May et al., 2009). This gap morphed into a theory by May in 2006, when he and his group of researchers held clinical trials to understand better how the theory worked and what actions inhibit the adoption of the complex new models in an

organization (May, 2006). The third phase of this research has concluded with the 2009 study that explained how practices became routine and embedded into an organization (May & Finch, 2009).

Harry James Nelson at the University of Colorado published a study in 1998 titled *On Process Theory* (Nelson, 1998). This dissertation explores the process by which a replicable result is obtained. This work is not cited in May's work and does not show any of the scientific rigor that May has provided. Nelson has considered a simplistic business process and indicated that a change in the process affects the performance of that process, which ultimately affects the outcome. To demonstrate the effectiveness of his model, Nelson has demonstrated the outcome with the example of baking cookies. He has adjusted the process and recorded the outcomes, which is a simple but effective method (Nelson, 1998). This study is relevant because it is one of the few studies to use the NPT or procedure outside of May (May et al., 2003).

Summary

Based on the literature review, the history of training is thousands of years old, and in the past several hundred years, science has advanced the knowledge of adult learning tremendously as it relates to training. Also, this body of knowledge has begun the process of understanding how learning and training organizations can operate in a changing technological environment. The history of training explains that once religious institutions lost the monopoly on dictating how and what to think, social scientists began to advance the field of training and education. With the Industrial Revolution, training became more critical to ensure that productivity is matched to demand. However, this trend changed with technology, worldwide wars, and globalization began to require a different kind of training model. Moreover, the body of knowledge around adult learning shows that adults are self-motivated learners who can work

remotely, which means that adult learners can work with knowledge management systems and online learning.

The review of the history of training demonstrates a constant migration toward modern training methods. An effective modern training model must be flexible. Also, an effective training model must follow accepted and proven theories, comply with adult learning models, and be adaptable to many different methods of training and communication. The Training Home program fits the parameters as outlined in the literature and is worthy of further study.

CHAPTER 3. METHODOLOGY

This chapter reviews the methodology of the research used in this study to determine the statistical significance of various aspects of the Training Home program. Additionally, it includes information about the study design, the theories behind the research, the methods used to gather all of the data, and the statistics used for analysis. Lastly, this chapter provides information about the population, ethical considerations, and the setting of the study.

Purpose of the Study

This study was undertaken to determine whether the Training Home program at the national nonprofit was an efficient use of resources and if it delivered more training per employee. The problem that this study address is that nonprofit organizations often cut training funds during difficult economic times (Collins, 2014; Mailepors, 2009; Morreale, 2011). This cutback could be considered a flawed practice since peer-reviewed data have shown the value of training employees (Al-Zoubi, 2012; Jurkiewicz & Brown, 2000). Since the Training Home program is new and uses technology that was not available ten years ago, the data are relevant information for any organization that trains employees.

Research Questions and Hypotheses

RQ 1: How does the reported level of helpfulness of the Training Home program vary by staff demographics?

H_0 1: The reported level of helpfulness of the Training Home does not vary by staff demographics.

H_a 1: The reported level of helpfulness of the Training Home varies by staff demographics.

RQ 2: How are levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home different between employees that have or have not been trained using the TH program?

H_0 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are not different between employees that have or have not been trained using the TH program.

H_a 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are different between employees that have or have not been trained using the TH program.

RQ 3: How does the cost for each unit of training change after the implementation of the Training Home program?

H_0 3: The cost for each unit of training does not change after the implementation of the Training Home program.

H_a 3: The cost for each unit of training changes after the implementation of the Training Home program.

RQ 4: How does time spent on training change after the implementation of the Training Home program?

H_0 4: The time spent on training does not change after the implementation of the Training Home program.

H_a 4: The time spent on training changes after the implementation of the Training Home program.

RQ 5: When using the Training Home program, how do supervisors report the ease of tracking employee training, evaluating employee training, tracking certifications, and tracking staff progress?

H_0 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is not different after the implementation of the Training Home program.

H_a 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is different.

RQ 6: What is the usage of Training Home versus informal training methods?

*H*o 6: The usage of Training Home is not different from the use of informal training methods.

H_a 6: The usage of Training Home is different than the use of informal training methods.

Research Design

This research includes a program evaluation using a longitudinal quantitative study design that used training data collected before and after implementation (Trochim, 2006; U.S. Department of Health and Human Services, 2016). This research does not test the NPT but instead uses it to frame the training model. The goal of the study is to determine the actual outcomes provided to an organization through the use of the Training Home program. It is important to note that according to the CDC, this methodology is appropriate for use because it answers the question of whether the program delivered matched what was promised to the public, donors, or key stakeholders (Centers for Disease Control and Prevention, 2017). This

research uses quantitative methods, comparative charts, and simple statistics to study and describe the data. According to Field (2009), using a Kruskal-Wallis test is the best statistical methodology in a study with group comparisons of ordinal level dependent data. The use of charts, simple mathematics, Kruskal-Wallis, and Mann-Whitney U tests are commonly used in program evaluations and are appropriate for this evaluation of the Training Home program (Centers for Disease Control and Prevention, 2017; Field, 2009).

The Training Home program is a cloud-based training delivery system. By design, it analyzes an employee's or volunteer's job description and partitions that job description into training modules or training vignettes. The training may take many forms, such as videos, links to outside websites, one-on-one meetings, lectures, seminars, off-site training, or articles to read. The training material can originate from the national level of the nonprofit used in this study, or it can stem from any qualified outside source. For example, the national nonprofit trains all staff in concussion management using the CDC website (Centers for Disease Control and Prevention, 2016). Training Home directs the user to the exact training required on the CDC website. Once the individuals have completed the training, they must download a certificate from the CDC program and upload that certificate onto the appropriate Training Homepage, thereby signifying completion of the assigned training.

The national nonprofit collected the original data for this study through an electronic survey given to all of the staff enrolled in the Training Home program. The company that developed Training Home created the survey in conjunction with the national nonprofit marketing department. The purpose of the survey was to gather data on the use of the Training Home program and discover the strengths and weaknesses of the program. The research method undertook this program evaluation to gather data from the organization and analyze the results.

Because all of the data were secondary, no individual permissions were required, only permission from the Board of Directors of the national nonprofit was necessary (Research Ethics Guidebook, 2016). Using the assumptions from the NPT, the overarching hypothesis is that the Training Home program using the checklist process leads to lower cost per training unit, increased number of training vignettes delivered, and the number of staff who report that the Training Home program is useful. The research questions that appear in the following section measure these points.

The theory that drove the Training Home program evaluation was the NPT (May & Finch, 2009), and the checklist procedure was an important aspect of the evaluation as well. The knowledge that was transferred by the Training Home program itself is not at issue in this study; this research is concerned only with the mechanism used to transfer that knowledge and the effectiveness of that system. This national nonprofit branch has existed for more than 140 years and has the basic capabilities to train staff in a manner that has allowed this location to continue to prosper, so the ability to train was not in question. The training methods used at this location have been in place for a very long time, so the question was whether the Training Home program represents an improvement that advantageously applied new technology and created progress in the existing body of knowledge, as seen in the literature review.

The research questions were chosen to determine if the new training system was more effective than the previous training. If Training Home was more effective, as shown by the data, then the Training Home program should be used in the future. In contrast, if it was not as effective, the old system should remain in place. The hypothesis is that the Training Home program improves training delivery for staff, gives supervisors an effective list of what each staff member has been trained to do, and improves staff's knowledge of their required job skills.

The Training Home program itself was created natively without the benefit of the knowledge and theory used in this study. However, as evidenced by the literature review, the NPT using a checklist procedure fits well with this program and explains the results of the variables and questions measured. Based on the questions asked in the survey and the study, Table 1 outlines the variables associated with the study, in addition to the type of variable, the survey question associated with that variable, and the theory to which the variable relates. Table 2 shows the relationship between the questions asked to obtain the secondary data and the variables. Not all questions from the survey were used in the analyses because not all of them directly related to the research questions.

This study could be replicable at another branch or another business. The size of the sample group is not too large for replication, nor is the size of the nonprofit organization. Thus, a researcher could find an organization where the member demographics may match those of this nonprofit location. The Training Home program will soon be available for any researcher's use. The survey questions are included in this document and any researcher can easily duplicate it in a paper or electronic format. Ultimately, the simplicity of the study means that researchers can replicate it in the future (Greens, 2014).

Table 1

Variable Type, Survey Question, Theory

Variable type	Variable name and question #	Link to theory
Independent variable	Age questions: Q4	Age is a critical factor in the type of learning to which a person is accustomed. The efficacy of the Training Home program may vary by age, so this factor needs to be tested (Alshare et al., 2012).
Independent variable	Education level questions: Q5	In this study, the education level was important because of the employee's comfort level with remote learning and more intense levels of training (Pangiotakopoulos, 2011).
Independent variable	Gender questions: Q6	There is no evidence in the literature to indicate that there is any difference by gender in the usage of Checklist Procedure. However, it should be measured for verification.
Independent variable	Job status questions: Q2	In this study, the term *status* is used as hourly, full-time, or exempt, which is an indication of supervisory status (Jurkiewicz & Brown, 2000). This point is important in the study because it shows the value of the Training Home program for supervisory and executive purposes.
Dependent variable	Time spent in training questions: Q4	This variable is time spent in training. This is important in light of the studies that have shown a connection between training and customer or staff satisfaction (Collins, 2005; Jurkiewicz & Brown, 2000).
Dependent variable	Cost per training unit questions: Q3	This variable is important to study because business is based on money, and the efficient use of money is important in any business endeavor. Interviews with United Way, the national nonprofit used in this study, and Big Brothers have shown training can be foregone during a financial crisis, so attempting to be as efficient as possible with limited financial resources is very important (Bolton, 2007).
Dependent variable	Supervisor usage questions: Q6	Supervisor usage ties back to the theory that for a checklist process to work properly, there must be accountability for the checklist via a hierarchy. This means that managers have to find this tool useful in tracking their direct reports (Nelson, 1998).
Independent variable	Learning method questions: Q1, Q6, Q7	An individual has a preferred learning method, and Training Home needs to be able to fulfill the varied needs of the staff to be effective. These variable ties back to the theory that to be effective, the Training Home program has to work with all different types of learners (Alshare et al., 2012).
Dependent variable	Staff knowledge questions: Q2, Q5, Q7	The program that is being measured is designed to improve the level of staff knowledge. The study must measure the staff's self-reports around their change in levels of knowledge after implementation of Training Home (Garvin, 1993).

Table 2

Survey Questions

Personal level data/demographics—independent variables	Training and usage—independent variables	Outcomes—dependent variables
Q1. How long have you worked for the national nonprofit?	Q8. How well have you been trained to use Training Home?	Q10. Do you think Training Home will significantly improve your level of training and knowledge about the national nonprofit?
Q3. What is your job status?	Q9. How many overdue trainings do you have?	Q11. Do you think Training Home will significantly improve your level of knowledge about the national nonprofit?
Q4. How old are you?	Q13. Have you found Training Home easy to use?	Q12. Has Training Home been helpful in getting to know staff from other departments?
Q5. Education level	Q14. Select the % that applies to how well you were trained.	Q15. How well trained are you to do your assigned job function?
Q6. Gender	Q17. How do you prefer to learn?	Q16. Does Training Home help prepare you to do your job in a better manner than before we used the program?
		Q18. Were the trainings comprehensive?
		Q19. Has Training Home made it easier to track your staff's trainings?
		Q20. Has Training Home made it easier or harder to evaluate your staff?
		Q21. Has Training Home made it easier or harder to track certifications?
		Q22. Has Training Home made it easier or harder to follow your staff's progress in learning their assigned skill set?

Note. Survey questions were created by management personnel at Site 1 to evaluate the Training Home program. Permission to publish these survey questions was obtained from Site 1 as part of use of the secondary data.

Target Population and Sample

Population

The population sampled for the study included the entire staff at the nonprofit affiliate branch during the implementation phase of the Training Home program from 2014 to 2015. The seasonal high is 450 employees because staff numbers increase due to summer camp programs. Staff completed the survey in the year 2014. This affiliate branch administered the survey and then provided data for this study. Because this is a program study that uses secondary data, the researcher had no control over who completed the survey given by the organization. The survey was not mandatory for staff, but the organization's human resources department believed there was a highly representative sample from the staff. The basic population demographics are in Table 3.

The marketing department of the national nonprofit created and distributed the initial survey. This program was only in use at this one affiliate branch, all of the surveys and research were created specifically for this location. The survey was electronic and created with a software program called SurveyMonkey (2017). The population that received the survey was the entire staff of this affiliate branch, which consisted of approximately 450 individuals, as listed in Table 3. The survey was kept open for approximately two weeks, and by the time it was closed, 226 staff had responded. This number represents 50% of the staff, which makes it statistically valid.

Table 3

Staff Demographics

Staff demographic	Number responding	Percent of total
Exempt	*n* = 18	4%
Full-time	*n* = 23	5%
Hourly	*n* = 310	69%
Seasonal	*n* = 99	22%
Number of female staff	*n* = 271	60%
Number of male staff	*n* = 179	40%
Total number of staff	*n* = 450	

Sample

As shown above, the size of the entire staff population was *(n* = 450). However, of the 450 staff the number of respondents was (*n* = 226). All staff members were invited to complete the survey, though it was not mandatory. Based on the number of respondents, the results are statistically valid (Field, 2009).

Power Analysis

For this study, the minimum sample size necessary to provide a valid result for the population is 90 individuals. The survey's final number of 226 participants exceeded the required minimum of 90 individuals, so the data have the required confidence interval of 5%. According to Tabachnick and Fidell (2006), an appropriate sample size is estimated with a baseline number of 50 and adding eight individuals for each independent variable; consequently, for this study, the result is a minimum sample size of 90.

Procedures

Participant Selection

The participants for this study were 100% of the staff members employed at this one affiliate branch location at the time of the study. This study excluded no individuals or groups. There were no other groups to choose from since this affiliate branch was selected as the only group to test the Training Home program.

Protection of Participants

According to the Institutional Review Board approval document that was submitted and accepted, there were no vulnerable populations in this study. Vulnerable populations include groups such as the elderly, prisoners, and children (University of North Carolina, 2017); this study did not include any individuals within those groups. Additional safeguards were also in place because the data were secondary to the researcher and no identifying information was given to the researcher, which negated any chance of compromising the responses given by the employees.

Data Collection

As stated above, the bulk of the data was gathered by the national nonprofit in concert with the Training Home developers via SurveyMonkey (2017) and then shared with the researcher. The survey tool was created by the program developers and the national nonprofit to fulfill the need to gather information about the staff use of and satisfaction with the Training Home program. To distribute the survey, SurveyMonkey (2017) used the preferred email address given by each employee to the human resources department of the affiliate branch. No employee was excluded from receiving the survey, and completing the survey was optional. The national

nonprofit affiliate branch administrators sent the survey to 450 total staff, and 226 staff participated in the survey for a response rate of 50%.

The rest of the data for this study were collected in six different ways. First, the annual budget for training in the fiscal years of 2013 to 2015 were provided by the CFO of the affiliate branch, Site 1. In this study, all data are presented in a measure of ratios from one fiscal year to the next and include the years for the implementation of the Training Home program. In this circumstance, the national nonprofit Chief Financial Officer provided the data to the researcher because the data were not confidential, were in the public domain, and had no names attached to any section. The specific information provided to the researcher included the overall cost of annual training for Site 1.

Second, the study used the internal human resources data from Site 1 to determine the total number of training vignettes delivered each calendar year. The human resources department data had no identifiers. In the study, this information was compared to overall employee count and overall costs of training for each calendar year. The ratios showed the value of a delivery method per unit of training. These data were given to the researcher by the Senior Vice President of Human Resources at Site 1.

Third, the study used the reported training for Site 1 from the years 2013 through 2015 from the human resources department without any identifiers. The data were quantitative measures that show the ratio of training in the year before the program's use and the numbers during use. These data were given to the researcher by the Senior Vice President of Human Resources at Site 1.

As stated above, the study used the Training Home survey administered to all staff of the national nonprofit Site 1 during the implementation phase of the Training Home program during

the years 2014 and 2015. This survey was the fourth way in which data were collected. The data stemmed from the human resources and marketing departments and included no identifiers. The analysis of the results of the survey appears in Chapter 4. Information from the survey includes quantitative and qualitative data, but the analyses in this study use only the quantitative data. This survey was administered by sending it to the employees via email through SurveyMonkey (2017). No questions were changed at any time. The original instrument consisted of 25 questions. The first seven questions asked for demographic information and used appropriate scales for requesting the respondents' years working at Site 1, age, education level, gender, and job category. Questions 8 through 13, 15, 16, and 18 used a Likert-type scale to answer the questions. Questions 14 and 17 asked participants to estimate their percentage of time spent in various types of training. Questions 19 through 22 had only two answers from which to choose. Questions 23 through 25 asked for written answers, and the results are not used in this study.

Data were collected in a fifth way through several questions in the survey that asked for clarification of respondents' answers through written responses. Finally, data were also collected about the demographic makeup of the staff. The demographic data were obtained from the human resources department of the research site (Site 1) and were macro so that no single individual could be identified. The data are valuable to show if the survey is statistically valid.

Data Analysis

The following discussion describes how each question was analyzed and provides the specific hypothesis for each question.

RQ 1: How does the reported level of helpfulness of the Training Home program vary by staff demographics?

H_0 1: The reported level of helpfulness of the Training Home does not vary by staff demographics.

H_a 1: The reported level of helpfulness of the Training Home varies by staff demographics.

This question was analyzed in three different ways. The first method used a Kruskal-Wallis test also referred to as a rank one-way ANOVA (Laerd Dissertations, 2017) analysis to examine the level of improved knowledge by different job status. The second method used non parametric correlations between improved knowledge and both age and education level, and the third method was a Mann-Whitney U test that examined differences in improved knowledge by gender.

RQ 2: How are levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home different between employees that have or have not been trained using the TH program?

H_0 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are not different between employees that have or have not been trained using the TH program.

H_a 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are different between employees that have or have not been trained using the TH program.

This question was answered using cross-tabulations to show the differences between the variable of staff who used the Training Home program and those who did not (Higgins, 2005). A Mann-Whitney U test was used to examine differences between the staff who used Training Home and those who did not, and this test is completed by evaluating how comprehensive the

training was via Training Home, how well-trained the staff was for job functions, and if Training Home improved the reported levels of knowledge of the national nonprofit The goal was to measure the impact of the dependent variables on the use of the Training Home program.

RQ 3: How does the cost for each unit of training change after the implementation of the Training Home program?

H_0 3: The cost for each unit of training does not change after the implementation of the Training Home program.

H_a 3: The cost for each unit of training changes after the implementation of the Training Home program.

This question was answered using descriptive analysis with consideration for three data points.

1. Units of training delivered for the fiscal year before the implementation of Training Home and the number of units of training delivered over the two years following where Training Home was used.
2. The total budget money spent on training through salary and direct costs for the years listed in the first point of this list.
3. The considered fiscal years being 2013, 2014, and 2015.

The resulting ratio of dollars to unit per year was found through simple descriptive mathematics using division and comparison. The hypothesis is that the effectiveness of the training dollars increased with the use of Training Home.

RQ 4: How does time spent on training change after the implementation of the Training Home program?

H_0 4: The time spent on training does not change after the implementation of the Training Home program.

H_a 4: The time spent on training changes after the implementation of the Training Home program.

The national nonprofit's human resources department at Site 1 provided the information necessary to answer this question using descriptive analyses. The data obtained from the training budget included salaries paid by the training budget and the hours spent in training. The data were compared through descriptive analyses of the number of training vignettes given through Training Home in the years 2013, 2014 and 2015. The data were obtained through the embedded analytics of the Training Home program. The hypothesis is that the results show that staff spent more time in training than in the past.

RQ 5: When using the Training Home program, how do supervisors report the ease of tracking employee training, evaluating employee training, tracking certifications, and tracking staff progress?

H_0 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is not different after the implementation of the Training Home program.

H_a 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is different.

This question was analyzed via a frequency table (Field, 2009) to show the supervisors' responses to the questions about the ease of tracking employees, training, certifications, and

progress and the ease of using the Training Home program for evaluations. For this study, the human resources department reported the frequency of the delivery of certified training for 2013. Formal or certified training is herein defined as a training session that tracks attendance and has a standardized, replicable agenda so the employee can be held accountable for the knowledge transferred in that training. The number of training vignettes in 2014 and 2015 is tracked through Training Home, which has the built-in capacity to monitor and report the total number of training vignettes individuals have completed. The data from 2013 were compared to the Training Home number of reported training vignettes delivered for 2014 and 2015. This process was accomplished using descriptive mathematics and comparisons that showed the number of training for each year to highlight the change in training over time. The hypothesis is that more training units were delivered through Training Home than in the year prior to its implementation.

RQ 6: What is the usage of Training Home versus informal training methods?

*H*o 6: The usage of Training Home is not different from the use of informal training methods.

H_a 6: The usage of Training Home is different than the use of informal training methods. The data were coded into two distinct categories: zero for all respondents who indicated learning through informal methods and one for all respondents who chose formal methods. This information was examined using a frequency table that displayed the ways the respondents learned specific job functions. The secondary data were analyzed using SPSS version 24 software. This tool follows all necessary guidelines as outlined in the statistics textbook by Field (2009). Information about SPSS can be found via the company's website (International Business Machines, n.d.).

Instruments

Survey

The national nonprofit and the developers of the Training Home program created a survey for use in the development of the software program and to gauge staff responses to the program. The researcher did not have any input in the creation of the survey, nor was it verified or tested in any manner. Subsequently, all data derived from the survey is secondary to the study. The survey questions are as follows:

Survey Q1—How long have you worked for the national nonprofit Site 1?

Survey Q2—How many times have you taken this survey?

Survey Q3—What is your job status?

Survey Q4—How old are you?

Survey Q5—What is your education level?

Survey Q6—What is your gender?

Survey Q7—Have you registered for Training Home?

Survey Q8—How well have you been trained to use Training Home?

Survey Q9—As of today, do you have any red icons?

Survey Q10—Do you think that Training Home will significantly improve your level of training and knowledge about your job functions?

Survey Q11—Do you think that Training Home will significantly improve your level of knowledge about the national nonprofit?

Survey Q12—Has Training Home been useful in meeting and getting to know staff from other departments?

Survey Q13—Have you found Training Home easy to use?

Survey Q14—After each category, select the percentage that applies to how you were trained.

Survey Q15—How well trained are you to do your assigned job functions?

Survey Q16—Does Training Home help prepare you to do your job in a better manner than before we used Training Home?

Survey Q17—How do you prefer to learn?

Survey Q18—Were the trainings comprehensive?

Survey Q19—For supervisors only. Has Training Home made it easier or harder to track your staff's trainings?

Survey Q20—For supervisors only. Has Training Home made it easier or harder to evaluate your staff?

Survey Q21—For supervisors only. Has Training Home made it easier or harder to track certifications of your staff?

Survey Q22—For supervisors only. Has the implementation of Training Home made it easier or harder to follow your staff's progress in learning their assigned skill set?

1. Survey Q23—If you were king for a day and in charge of Training Home, what would you change or add to make it work better for you?
2. Survey Q24—Are there any unexpected problems we have created by implementing Training Home?

Validity. The validity of the tool is dependent on its replicability, the consistency of the results, and its ability to measure what it claims to measure (Golafshani, 2003). The SPSS tool creates a valid measurement of what it claims to measure. In this case, the tool was not

constructed by the researcher, and the data from the national nonprofit Site 1 are historical, so any arguments around validity are moot. However, an argument can be made that the tool is valid because the hypothesis is supported by the statistical results. This would be a case in which the triangulation of the data supports the validity of the survey questions. However, this scenario is not an exact fit because the triangulation of data is achieved by using various methods of gathering data. In this case, the triangulation occurs internally via multiple research questions being answered in support of the hypothesis associated with each question (Holtzhausen, 2001).

Reliability. In this study, the reliability of the instrument is a function of whether the variables are constant and stable (Laerd Dissertations, 2017); when the variables are not consistent, then the reliability of the instrument can change. Ultimately, since these data were secondary, this point is moot as well. The dataset and its collection method were not in the control of the researcher, and the data exist as they are with the results being a representation of what was provided. This survey was created to evaluate specific program effectiveness and was not intended to be a standardized survey.

Ethical Considerations

This study has no ethical issues to consider because it used archival and secondary data provided by the organization and were free of any identifiers. All of the local affiliate staff members were asked to take the survey during regular business hours, and the survey was not mandatory. Additionally, all staff and volunteers participated in the use of Training Home as assigned within their job duties. Therefore, no group was exempt from the program, and no individuals or populations can be singled out (Smith, 2003).

Summary

Chapter 3 has outlined the methods used to collect and study the data regarding the Training Home program. Data were statistically analyzed using the SPSS 24 software, and financial and usage data is analyzed via a year-by-year comparison. All data were secondary to the researcher, thereby eliminating many of the considerations around survey validity and protection of the survey population.

CHAPTER 4. RESULTS

Chapter 4 examines the data generated to study the efficacy of the Training Home program. Surveys were provided to staff through the SurveyMonkey (2017) platform, and the data were analyzed using SPSS version 24 by International Business Machines (IBM). In this chapter, the output of the SPSS software is described, and the basic analyses of that output are reported. Chapter 5 presents an analysis of the Training Home program and reviews the research questions.

Background

Three types of software were used to collect and analyze the data for this study. The software that analyzed the survey questions was SPSS 24 (International Business Machines, n.d.), and this analysis occurred after the data were collected using the online data collection program SurveyMonkey (2017). Additional data are from the national nonprofit's in-house budgeting software program Blackbaud (2017). The data were then analyzed using different statistical tests, including Kruskal-Wallis, Mann-Whitney U test, and Spearman's Rho. All the abovementioned software is available to the public for purchase and was not proprietary to the organization.

Description of the Sample

It is important to evaluate the characteristics of the sample to look for any unusual outliers that may influence the generalizability of the sample. For this study, the target population comprised the entire staff of the affiliate branch during the implementation phase of the Training Home program from 2014 to 2015. This national nonprofit has a seasonal high number of 450 staff members. Of the 450 staff members, 50.22% (n = 226) responded to the survey. Because this is a program evaluation using secondary data, the researcher had no control

over who was given or who completed the survey. The demographic information of the respondents is shown below in Table 4. The demographics show that the majority of respondents were female. The job status of the staff was appropriately mixed at all levels, with the largest group being part-time hourly workers at 64.6% of respondents (n = 146). The educational level of the staff surveyed matched the local demographics as seen in the last census (U.S. Department of Commerce, 2016). Lastly, the staff's age breakdown showed a mix of all age levels with the largest group representing the 31-50 years of age bracket at 26.11% (n = 59).

Table 4 also visualizes how the distribution of respondents corresponds to the distribution of staff groups. For example, the group with the highest number of respondents is the part-time hourly worker's group, at 64.6% of the total (n = 146). This group produced the largest number of survey responses, as the full-time hourly employee's group had a total of 12.4% of the responses (n = 28), and the full-time exempt group had 11.5% of responses (n = 26); this breakdown also matches the ratios of the overall staffing.

Table 4

Job Status of Staff

Job Status	Frequency	Percent	Cumulative Percent
Full-time (Hourly)	28	12.4	12.4
Part-time (Hourly)	146	64.6	77.0
Full-time (Exempt, salaried)	26	11.5	88.5
Seasonal (Summer only)	26	11.5	100.0
Total	226	100.0	

Table 5 shows that there is an equal distribution of respondents across age groups. As expected, the 61 years and older category are lower, which is consistent with the overall staff

population. There are 123 responses by staff over the age of 30 years and 123 by staff under the age of 30 years.

Table 5

Age Range of Staff

Age Group	Frequency	Percent	Cumulative Percent
16-18 years	40	17.7	17.7
19-22 years	39	17.3	35.0
23-30 years	44	19.5	54.4
31-50 years	59	26.1	80.5
51-60 years	29	12.8	93.4
61+ years	15	6.6	100.0
Total	226	100.0	

Table 6 data mirror the local county census. A comparison of the local census and the census for the entire United States indicates that 88% of adults are high school graduates, 33% have a bachelor's degree, and 12% reported an advanced degree (U.S. Department of Commerce, 2016). The same census data from 2016 showed that in the local county, 94% of adults are high school graduates and 59% had a bachelor's degree or higher (U.S. Department of Commerce, 2016). The staff reported higher education levels than the national average, but the education levels are commensurate with the local county in which the study took place.

Table 6

Education Level of Staff

Education level	Frequency	Percent	Cumulative Percent
High school	49	21.7	21.7
College	118	52.2	73.9
Graduate	59	26.1	100.0
Total	226	100.0	

Crosstabs are typically used to describe two categorical variables. In this study, this statistic represents differences in demographics between those who used the Training Home system and those who did not (Field, 2009). Crosstabs were used to examine if the two groups had significantly different demographic characteristics. This comparison was possible because all new employees were required to use Training Home before their first shift. The crosstabs were run to account for the demographics of age, gender, job status, and education level. The results show no differences by age, gender, job status, or education level between the group that used Training Home and those who did not use Training Home. The demographic characteristics of the sample did not skew a positive result for the Training Home program by those who used it (Field, 2009).

Hypothesis Testing

RQ 1: How does the reported level of helpfulness of the Training Home program vary by staff demographics?

H_0 1: The reported level of helpfulness of the Training Home does not vary by staff demographics.

H_a 1: The reported level of helpfulness of the Training Home varies by staff demographics.

Research Question 1 was explored using the following methods: (a) Kruskal Wallis was used to identify any statistically significant differences between the average level of improved knowledge about the national nonprofit by job status, (b) Spearman's Rho was used to obtain a correlation between age and improved knowledge about the national nonprofit, (c) Spearman's Rho was used to obtain a correlation between education level and improved national nonprofit knowledge, and (d) Mann-Whitney U test was used to compare the average level of improved knowledge of the national nonprofit by gender. Since the focus of this research question is the usefulness of Training Home, it was important to filter the sample only to include people who used Training Home.

The Kruskal-Wallis test is used to determine if there is significance between groups of independent variables with ordinal level variables (Laerd Dissertations, 2017). This part of the study compared mean values for improved knowledge about the national nonprofit and job status. Job status included four groups: (a) full-time hourly (M = 3.035), (b) part-time hourly (M = 2.438), (c) full-time exempt (M = 3.461), and (d) seasonal summer (M = 2.576). The goal of this analysis was to determine any statistically significant differences in the average values of improved level of knowledge about the national nonprofit after using Training Home. As shown in Table 7, full-time hourly and full-time exempt employees had higher mean values on improved training and knowledge than part-time hourly and seasonal only workers. The overall Kruskal-Wallis results indicated that full-time employees rated improved knowledge of the national nonprofit higher than part-time and seasonal staff.

Table 7

Level of Improved Training and Knowledge by Job Status

Job status	*n*	*M*	*SD*	*SE*
Full-time (exempt, Salaried)	26	3.461	1.139	.223
Full-time (hourly)	28	3.035	1.137	.2150
Seasonal (summer only)	26	2.576	.856	.168
Part-time (hourly)	146	2.438	1.023	.0847

Table 8 displays the result of the Kruskal-Wallis Test. The Kruskal-Wallis test represents the variability between the groups. The Kruskal-Wallis test showed that there was a statistically significant difference between the groups of employees, ($X^2(3) = 21.259$, $p = .000$).

Table 8

Improved Level of Training and Job Function by Job Status

	What is your job status?	*N*	Mean Rank
Do you think Training Home will significantly improve your level of training and knowledge about your job functions?	Full-time (Exempt Salaried)	26	159.00
	Full-time (Hourly)	28	133.43
	Seasonal (Summer only)	26	111.10
	Part-Time (Hourly)	146	102.00
	Total	226	

Specifically, the findings suggest that the full-time exempt group, the part-time hourly, and the seasonal staff all found the Training Home to be helpful in improving training and knowledge. This result is valuable since the members of these groups constitute a majority of the staff as a whole. Since this group represents a majority of the staff, it will help with the spread

and normalization of the Training Home program to incoming staff and those that are not currently using the program.

The Spearman's Rho is a non-parametric statistic that examines the relationship between two variables. In this case, the two variables are age and improved knowledge and training (Field, 2009). There is no significant correlation between age and improved level of training and knowledge about job functions (r_s = .07, p = .32). This result specifies that age is not an important factor in the perceived effectiveness of the Training Home program. A Spearman's correlation was also run between education level and reported improved knowledge, but there is no significant correlation (r_s = .006, p = .924). This finding shows that there is no relationship between education level and knowledge, which is a positive result for the program because it indicates that the program is equally effective for all education levels.

A Mann-Whitney U Test was used to compare the differences between the two gender groups (Field, 2009). Table 9 shows that there is no significant statistical difference between the means of improved level of training and knowledge by gender in this study.

Table 9

Mann-Whitney test for Improved Level of Training and Knowledge by Gender

	Gender	*n*	*M*	*SD*
Do you think Training Home will significantly improve your level of training and knowledge about your job functions?	Female	151	2.668	1.069
	Male	75	2.600	1.127

The results indicate a U = 5440.00, p = .618, when comparing groups. These findings of the Mann-Whitney U test indicate there were no differences by gender in the improved levels of training or job knowledge by the use of the Training Home program.

RQ 2: How are levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home different between employees that have or have not been trained using the TH program?

H_0 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are not different between employees that have or have not been trained using the TH program.

H_a 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are different between employees that have or have not been trained using the TH program.

Research Question 2 was addressed using the Mann-Whitney U test. The Mann-Whitney U test was used to explore the differences between the group that used Training Home and the group that did not. The group that used Training Home reported that it improves the employees' level of training and knowledge and that it was comprehensive. Those who did not use Training Home also replied that the program could improve their knowledge as well. This result can be accounted for by the fact that staff interacts with one another, so the group that used Training Home and found it to be helpful may have reported that experience to the staff group that had not yet used it.

Table 10 displays the group statistics for those who used Training Home and those who did not use Training Home. The group statistics in Table 10 show that the staff who used Training Home had high mean scores in several areas. Interestingly, when asked how well trained the staff were for assigned job functions, those who did not use the Training Home program had a high mean as well, $M = 107.93$. This result suggests that all of the staff who

completed the survey felt well trained for the assigned job functions regardless of whether they used Training Home.

Table 10

Mann-Whitney U Test Statistics for Employee Use of the Training Home

	The employee used the Training Home Program	*N*	Mean Rank	Sum of Ranks
Think about each training you have completed. In general, were they comprehensive? For example, if the training was "how to close down the building," did your training teach you all you needed to know to accomplish that?	Did not use TH	92	87.16	8018.50
	Used TH	112	115.10	12891.50
	Total	204		
As of today, how well trained are you to do your assigned job functions?	Did not use TH	92	107.93	9930.00
	Used TH	112	98.04	10980.00
	Total	204		
Do you think that Training Home will significantly improve your level of knowledge about the national nonprofit?	Did not use TH	92	81.80	7526.00
	Used TH	112	119.50	13384.00
	Total	204		

When examining differences between those who used Training Home and those who did not use Training Home, the results are as follows, the comprehensiveness of training via Training Home is (U = 3740.50, p = .000), for how well trained you are for your job is (U = 4652.00, p = .202), and improved level of knowledge is (U = 3248.00, p = .000).

The results indicate that for those who used the Training Home program they found it to be comprehensive and that it improved their knowledge about their job functions. There was no significance found in how well trained the respondents reported they were for their job functions between those who used the Training Home program and those who did not. The results could suggest that the staff felt adequately trained for their job functions because of experience, informal on-the-job training, and other learning methods as opposed to the use of the Training Home program. This result may represent an issue with the survey question and can be rectified in subsequent studies. The data in Figure 1 may evidence this confusion.

Figure 1 visualizes the answers to the question of whether Training Home improved the staff's level of knowledge about their job functions. Respondents were grouped by staff who were not trained using Training Home (coded as 0; 40.71%, $n = 92$) and those who reported having received training via Training Home (coded as 1.0; 49.56%, $n = 112$). Figure 1 shows the staff who reported not learning via Training Home either did not think it was of use or were unsure about the usefulness of the program. The staff who said learning did stem from Training Home found it to be helpful. Interestingly, the chart also shows that some staff who did not learn from Training Home still reported that it would be helpful.

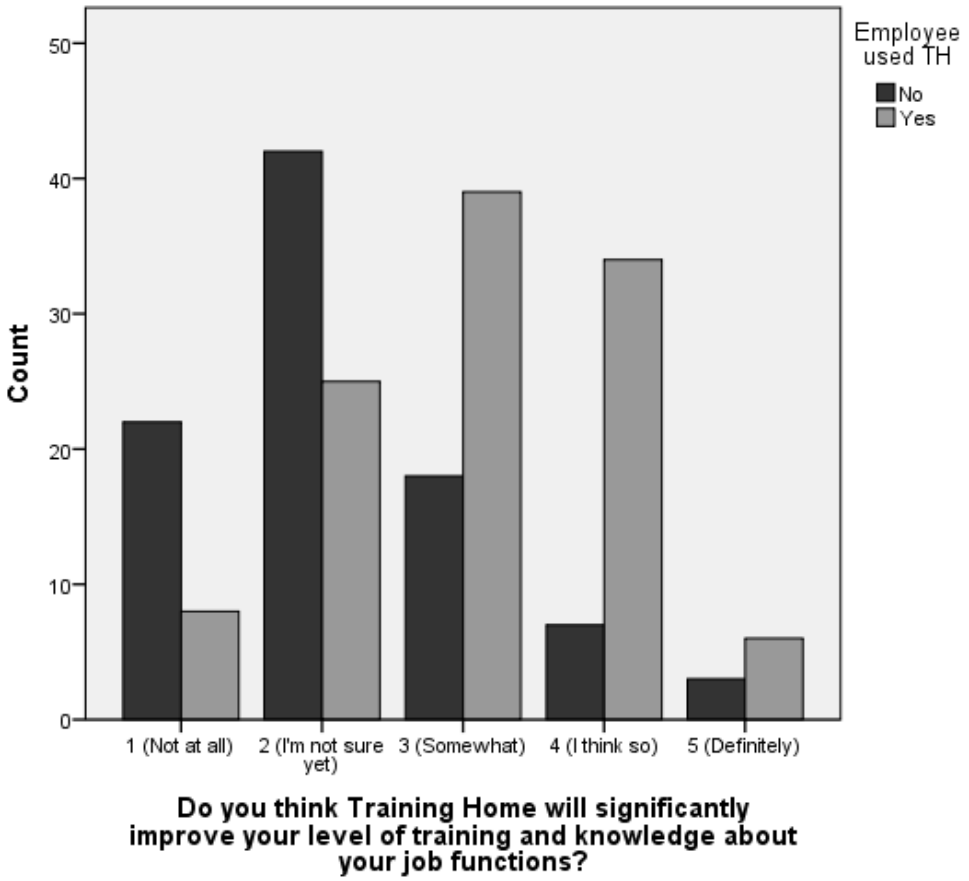

Figure 1. Improved knowledge from the use of Training Home.

The results of the analysis support the alternative hypothesis since those who used the Training Home program replied greater improvement in their levels of training and preparedness for their job functions when compared to those who did not use it. Additionally, even those who did not use the Training Home program found it to be potentially useful in improving overall personal knowledge of the national nonprofit and improving levels of job preparedness and training.

RQ 3: How does the cost for each unit of training change after the implementation of the Training Home program?

H_0 3: The cost for each unit of training does not change after the implementation of the Training Home program.

H_a 3: The cost for each unit of training changes after the implementation of the Training Home program.

Two data points over three years are considered for this question:

1. Training delivered per the calendar year in total; defined as formal training with an agenda and attendance taken so staff can be held accountable for the content of that training at a future date.

2. The total budget dollars spent on training for salary and direct delivery costs. (This figure refers to the direct compensation of the person if they took a unit of training outside of their normal work hours and the cost of a unit of training if the organization had to pay an outside person or organization to provide the training.)

The data points were gathered by the Site 1 Chief Financial Officer and the human resources department. Figures 2 and 3 represent the ratio of dollars to unit per year, shown in a histogram. The two years that were studied with the Training Home program show an increase in the efficiency of the ratio of dollars to training unit. Therefore, the question of whether the effectiveness of the training dollars would improve can be answered positively to support the hypothesis. It is important to note that the budget for training stayed constant throughout the study, and the average number of employees also remained equal at approximately 450.

Figures 2 and 3 show that the use of the Training Home program has increased the number of training vignettes from 897 units to 17,000 units at a descending cost of $46.56 per unit to $2.46 per unit. This finding supports the alternative hypothesis that the use of the Training Home program decreases the cost per unit of training. Figure 3 clearly shows that there is a decrease in unit cost over time.

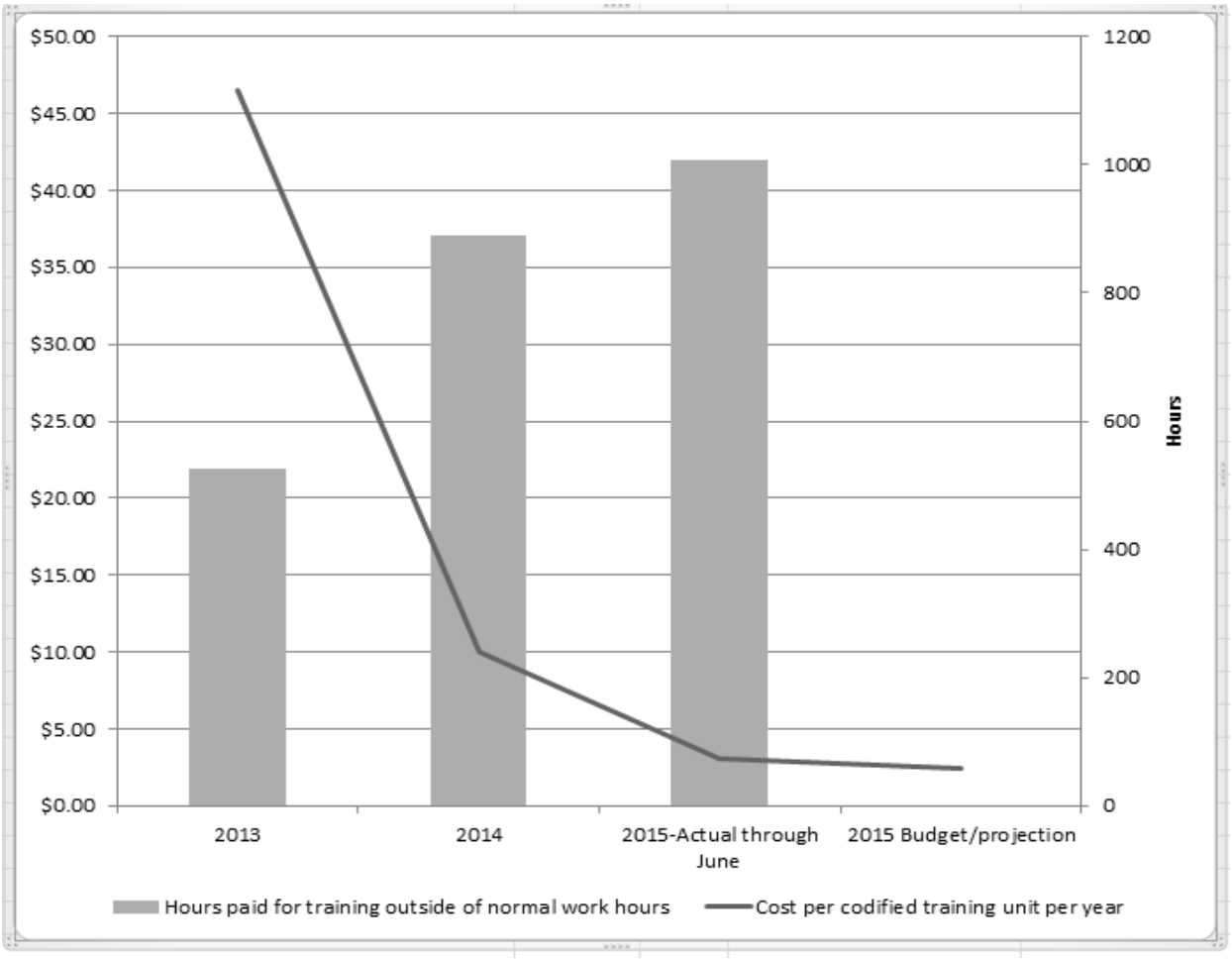

Figure 2. Hours paid for training outside of normal work hours and cost per codified training unit per year.

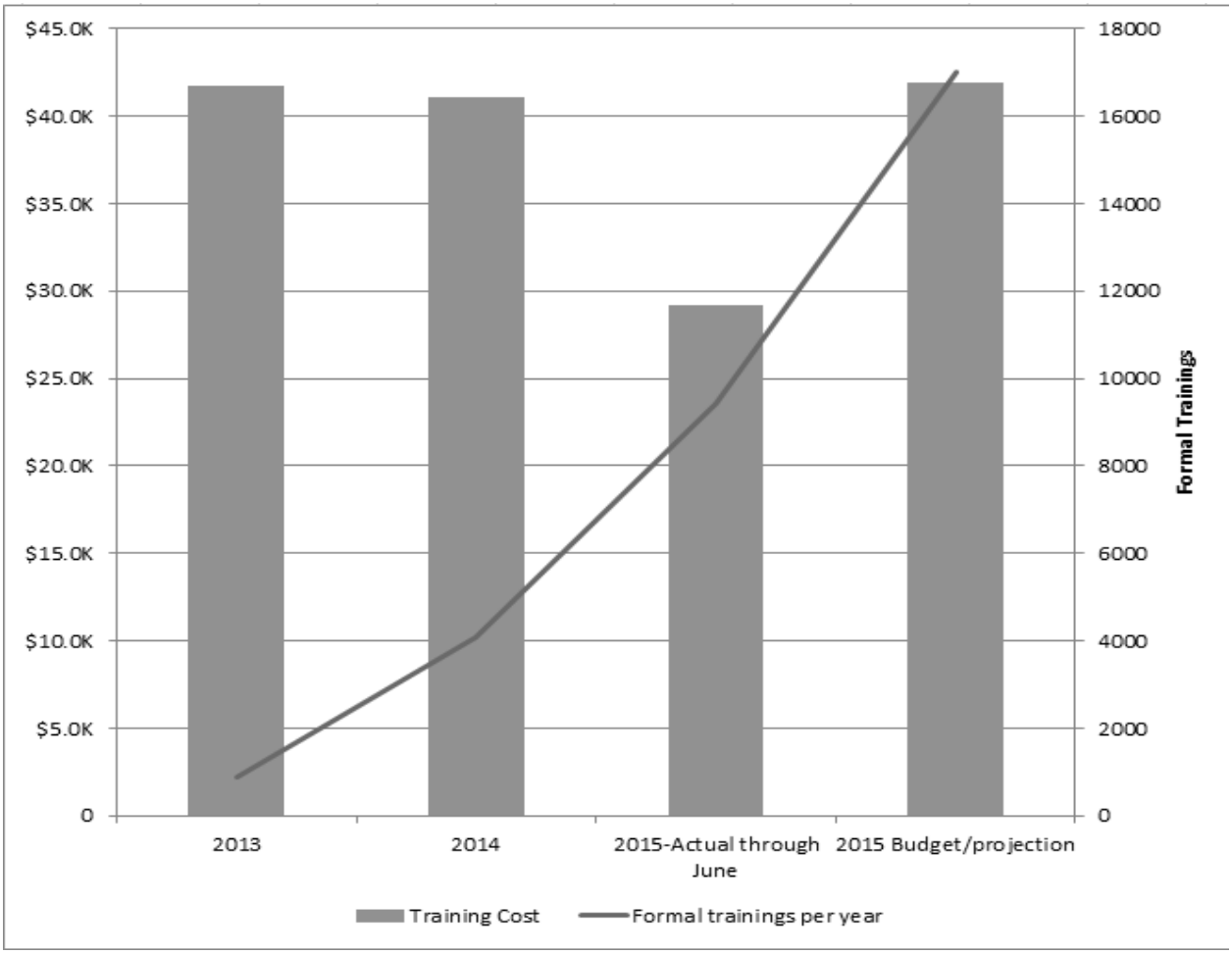

Figure 3. Training cost and formal training per year.

Table 11 shows the three variables of units of formal training, extra time spent in training outside of scheduled work hours, and total training costs for the two years of the study and the year before implementing the program. The comparisons support the alternative hypothesis. It is clear that costs stayed reasonably similar, but the number of training vignettes and time spent in training increased, thereby producing an increase in efficiency.

Table 11

Cost, Hours, and Number of Training Units Before and During the Use of Training Home

Costs per year for training	2013	2014	2015
Budget (in dollars)	37,691.00	33,951.00	33,600.00
Extra salary costs (in dollars)	4,082.34	7,121.97	8,287.00
Total (in dollars)	41,773.34	41,072.97	41,887.00
Number of hours paid for training outside of normal work hours	525	889	1,007
Number of formal training recorded per year	897	4,092	17,000
Cost per codified training unit by year	$46.56	$10.03	$2.46

The data support the alternative hypothesis. The Training Home program decreased the cost per unit of training, increased the hour's staff spent in training and increased the number of units of training delivered per staff member.

RQ 4: How does time spent on training change after the implementation of the Training Home program?

H_0 4: The time spent on training does not change after the implementation of the Training Home program.

H_a 4: The time spent on training changes after the implementation of the Training Home program.

Site 1 of the national nonprofit's human resources department provided information on the amount of time staff spent in training, and this information included the salaries paid from the training budget and the number of formal training sessions tracked by the department. The Training Home program's embedded analytics provided the number of training vignettes offered

since inception. The data points were compared by year for 2013 through 2015. The hypothesis is that staff report more time spent in training with Training Home than in the prior year (see Table 12).

Table 11 is important in the review of the fourth research question because it shows the budget for training, the total cost of time spent by employees outside of scheduled work hours, the number of formal training sessions recorded per year, and the number of units of training for that year. Supervisors were required to record all training into the Training Home program, even if a third party gave it to get an accurate count of training vignettes. Accordingly, Table 17 shows an ascending number of training vignettes per year after the implementation of the Training Home program. The data also indicate that after Training Home was initiated in 2014, the amount of time staff spent in training increased, which supports the alternative hypothesis.

RQ 5: When using the Training Home program, how do supervisors report the ease of tracking employee training, evaluating employee training, tracking certifications, and tracking staff progress?

H_0 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is not different after the implementation of the Training Home program.

H_a 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is different.

This question was analyzed using frequency tables to measure the percentage of supervisors who reported the increased ease or difficulty of tracking employee progress with

certifications, evaluating employees, and tracking compliance. The frequency charts represent 38 respondents who self-identified as supervisors. Figure 4 indicates that the majority of supervisors (80%; *n* = 30) found that the Training Home program made it easier to track staff training.

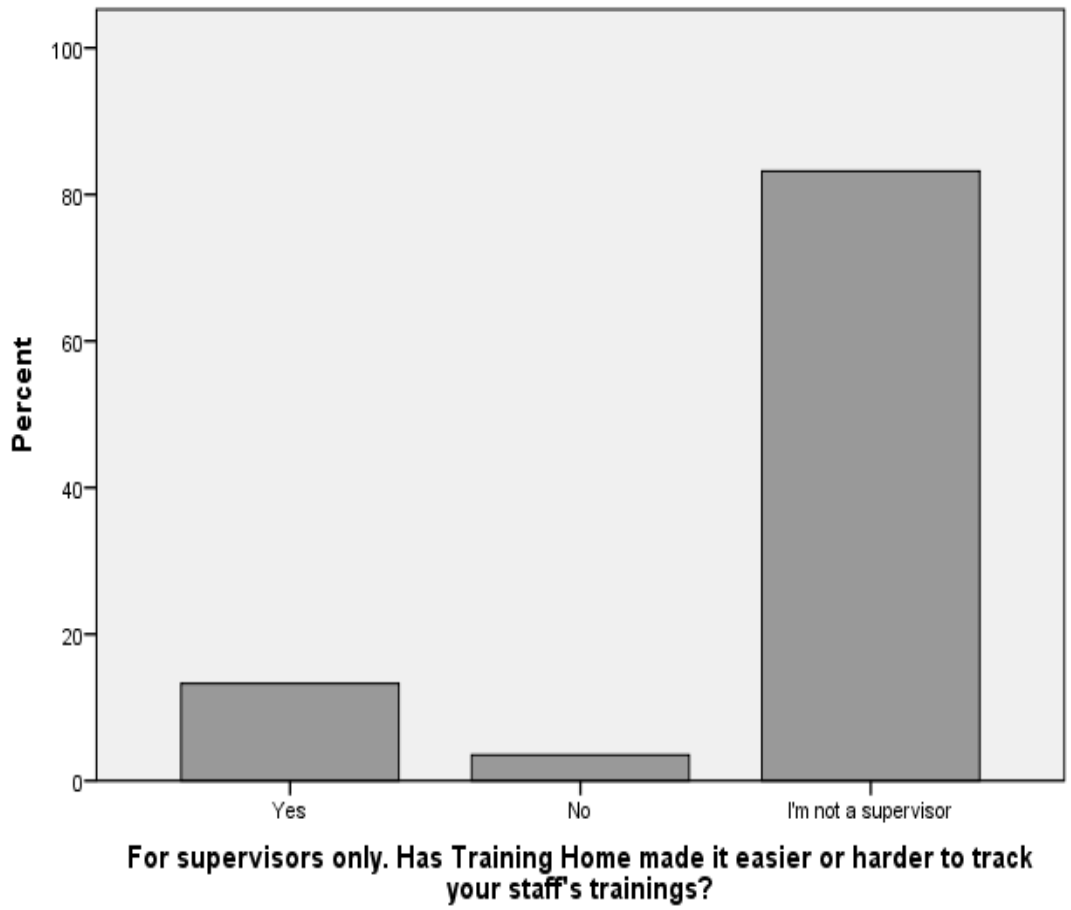

Figure 4. Tracking of staff training for supervisors. The bar graph shows the percent of supervisors who reported Training Home made it easier to track employees' completed training units.

Figure 5 illustrates that the majority of supervisors (80%; *n* = 30), found that the use of the Training Home eased the tracking of staff certifications.

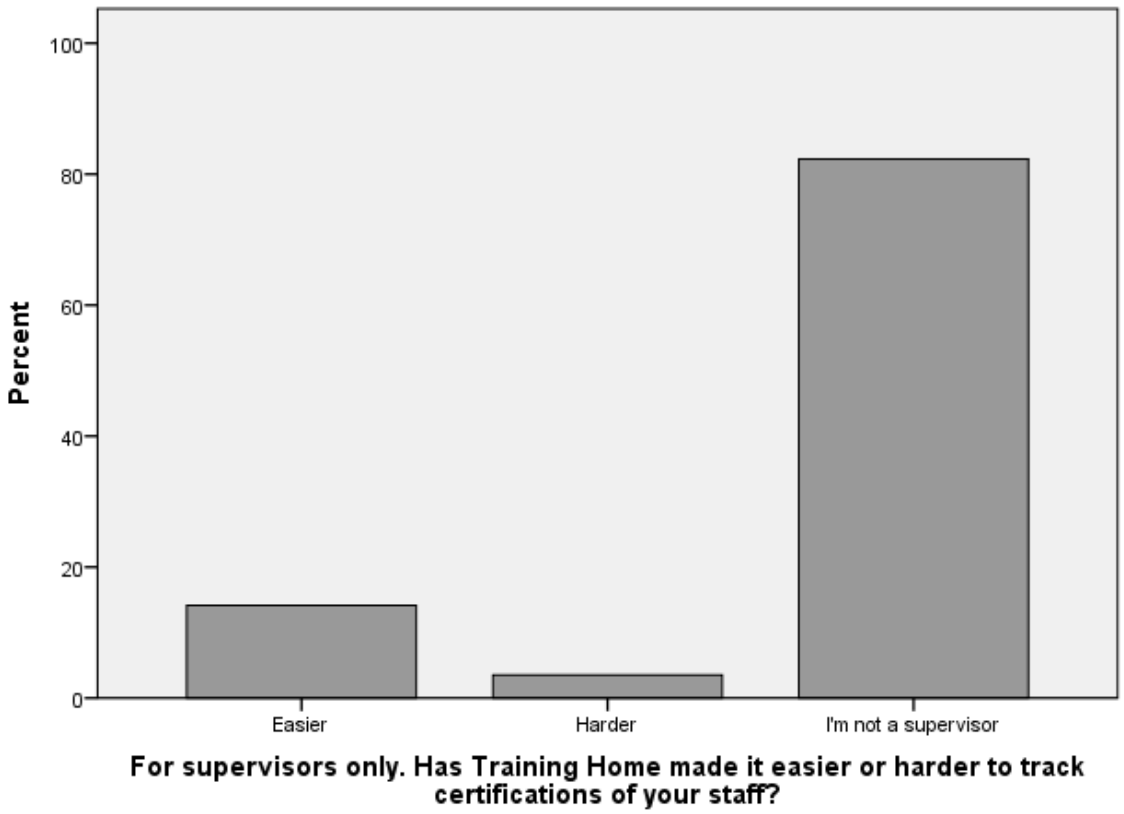

Figure 5. Tracking of certifications by supervisors. Bar graphs show the percent of supervisors who reported Training Home made it easier to track employees' certifications.

Figure 6 illustrates that a majority of supervisors (57%; *n* = 22) felt that the use of the Training Home program made it easier to evaluate staff. However, this is not a significant majority.

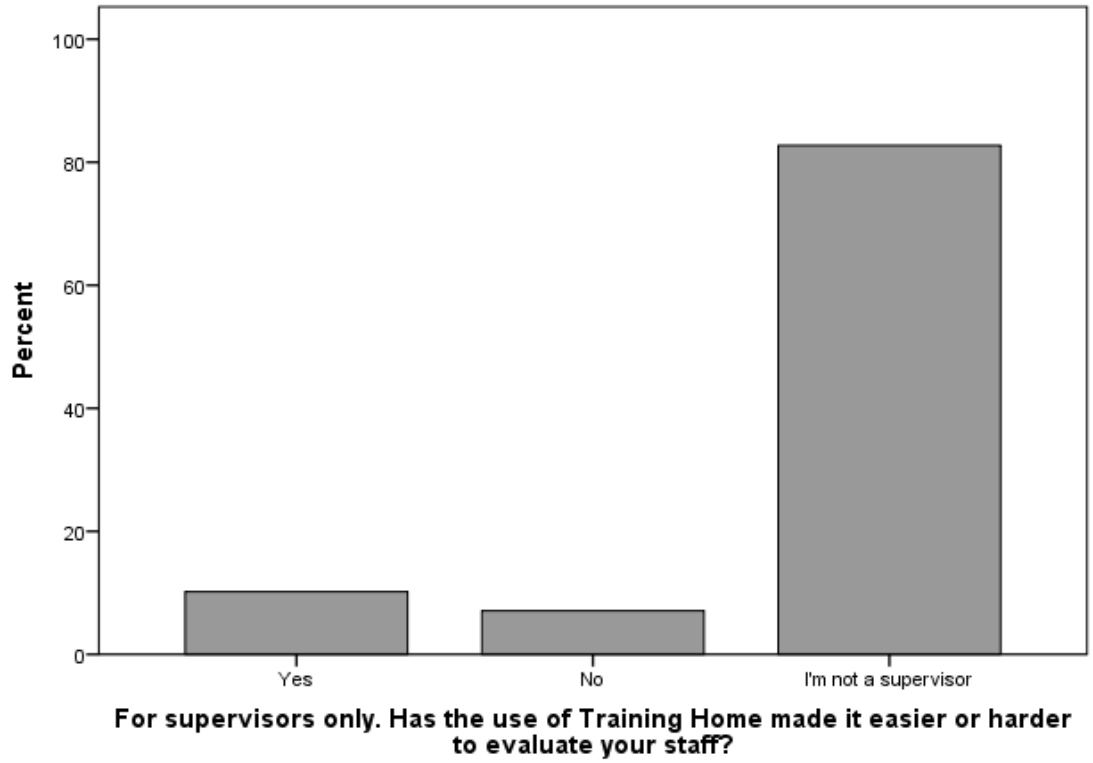

Figure 6. Percentage of supervisors who reported ease of evaluating staff with the use of Training Home. Bar graphs show the percent of supervisors who reported Training Home made it easier to evaluate staff.

Figure 7 shows that a significant majority (90%; $n = 34$) of supervisors found that Training Home made it easier to monitor staff's progress in learning assigned skill sets.

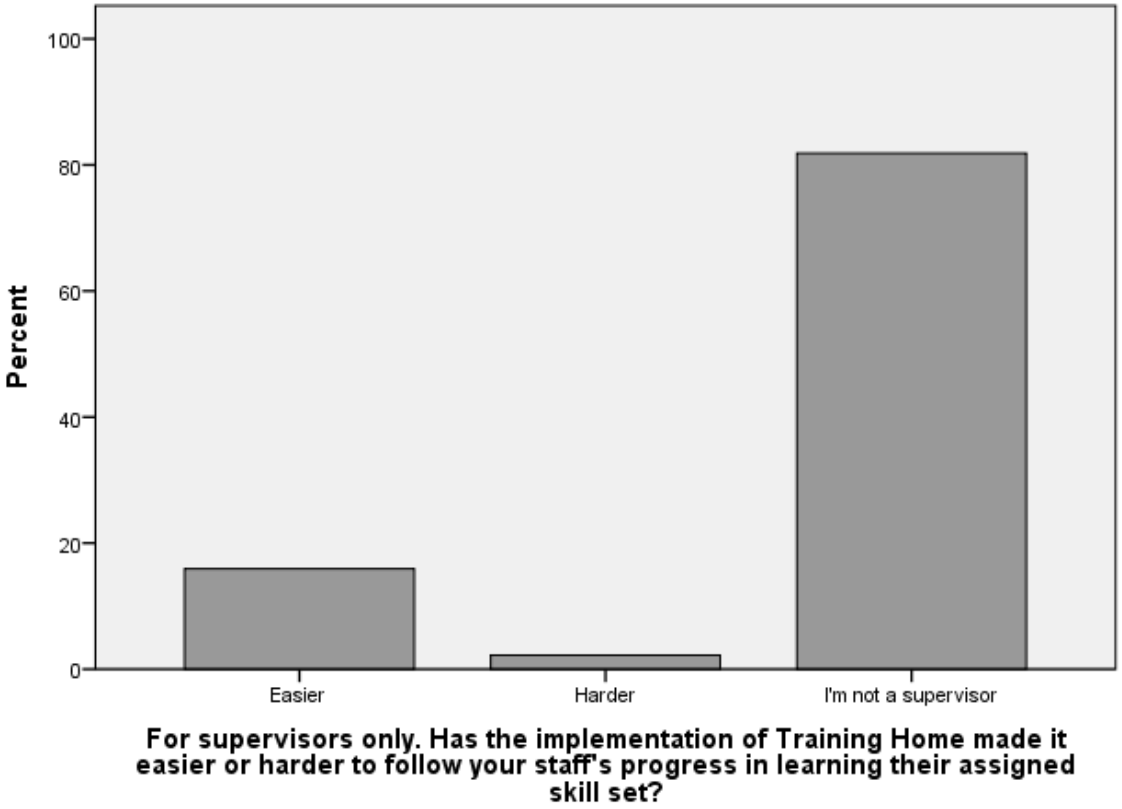

Figure 7. Supervisors report on the ease of staff evaluations with the use of Training Home. Bar graphs show the percent of supervisors who reported that Training Home made it easier to evaluate staff's progress in fulfilling their job functions.

The data represented in Figures 4, 5, 6, and 7 support the alternative hypothesis. The data in Figures 4 and 5 suggest that most supervisors believed that Training Home made it easier to track employees' training and certifications. The data in Figure 6 highlights that supervisors found that Training Home simplified evaluating employees, and the data in Figure 7 shows that supervisors believed that Training Home improved their ability to track employee progress in learning an assigned skill set. In summary, the data supports the alternative hypothesis for

Research Question 5. The Training Home program supports the needs of supervisors in tracking progress and reviewing staff performance.

RQ 6: What is the usage of Training Home versus informal training methods?

*H*o 6: The usage of Training Home is not different from the use of informal training methods.

H_a 6: The usage of Training Home is different than the use of informal training methods.

Research Question 6 was answered using frequency tables, which show the reported percentages for staff for both formal and informal methods of instruction. Survey question 14 asked respondents to check off the percentage that applies to how they were trained. Based on the percentages reported, which added up to over 100%, staff had difficulties answering this question in the manner intended. To remedy the over-reporting of percentages, the study the data were simplified into two categories: those who learned formally and those who learned informally. It is important to note that the Training Home program encompasses all forms of training except for informal.

Frequency Table 12 shows that 83.2% (n = 188) of staff attributed learning about their job functions to both formal and informal methods. Only 13.7% indicated that they had received no formal job training. This result means that the majority of staff received training via Training Home, which supports the intended use of the Training Home program. A goal for future studies could be to understand what is transmitted to staff in training that occurs informally and convert that information to the Training Home program.

Table 12

Received Formal On-the-Job (OTJ) Training as Part of Job Functions

Percent of informal on the Job Training	Frequency	Percent
No formal OTJ training	31	13.7
Any formal OTJ training	188	83.2
Total	219	96.9
Missing data points	7	3.1
Total	226	100

It is clear that the staff train in both formal and informal settings. The Training Home program is designed to incorporate all training methods into one program. Further data should be gathered to understand what job types receive training in either a formal or informal manner so that they can be added to Training Home. Lastly, the information given via informal training should also be understood and added to the Training Home program. Once that is discovered, most or all training can be formally tracked and updated on a regular basis.

Summary

Research Question 1

RQ 1: How does the reported level of helpfulness of the Training Home program vary by staff demographics?

H_0 1: The reported level of helpfulness of the Training Home does not vary by staff demographics.

H_a 1: The reported level of helpfulness of the Training Home varies by staff demographics.

In the overall Kruskal-Wallis test, there are statistically significant group differences by job category. There is a significant positive result for improved training and knowledge in full-time staff categories as compared to other groups. This finding may be the result of the fact that full-time staff had more exposure to the Training Home program than other categories. Additionally, the full-time groups had more units of training delivered to them via Training Home, so their experience is different from the other categories. There were no reported differences in age, educational level, or gender.

Research Question 2

RQ 2: How are levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home different between employees that have or have not been trained using the TH program?

H_0 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are not different between employees that have or have not been trained using the TH program.

H_a 2: The levels of training for job functions, improved knowledge of the national nonprofit, and perception of Training Home are different between employees that have or have not been trained using the TH program.

The analysis showed that there is significance regarding the training of job functions and comprehensiveness of the Training Home program. This result is notable, as it shows that a significant amount of the staff felt appropriately trained for their job functions, whether or not Training Home was used. However, staff who used Training Home had a better perception of the

Training Home program and reported having more knowledge about the national nonprofit then those who did not. The Training Home program delivers more units of training, including some historical knowledge about the national nonprofit and its mission, which may account for the reported higher levels of knowledge.

Research Question 3

RQ 3: How does the cost for each unit of training change after the implementation of the Training Home program?

H_0 3: The cost for each unit of training does not change after the implementation of the Training Home program.

H_a 3: The cost for each unit of training changes after the implementation of the Training Home program.

The results of this analysis suggest that the cost per unit of training changed from $46.56 before the use of Training Home to $2.48 with the use of Training Home. The value of a change in cost for training with online or computer-based learning is discussed in an article about training for flight controllers: when possible, replacing instructors with experiential computer programs and online learning saved costs over time and improved performance for new air traffic controllers (Updegrove & Jafer, 2017). In Africa, the limiting resource for access to air traffic control training is a lack of institutions and instructors. This limitation is combated by a three-month trial program around bioinformatics created for online learning and tested on 364 enrollees with positive results (Gurwitz, Aron, Panji, Maslamoney, & Fernandes, 2017). Both sets of authors have demonstrated that online learning models had value for the organizations by decreasing costs, which supports the findings of this research question.

Research Question 4

RQ 4: How does time spent on training change after the implementation of the Training Home program?

H_0 4: The time spent on training does not change after the implementation of the Training Home program.

H_a 4: The time spent on training changes after the implementation of the Training Home program.

The data analysis indicates that the total number of hours spent in training was 525 hours before the implementation of Training Home and 1,007 hours with the use of Training Home. This statistic represents a significant increase in the amount of time staff spent on training after the implementation of Training Home. Time spent in training improves performance, which has been evidenced by a recent study of bus drivers who were given more training and experienced improved driving and safety performance (van Niekerk et al., 2017).

Research Question 5

RQ 5: When using the Training Home program, how do supervisors report the ease of tracking employee training, evaluating employee training, tracking certifications, and tracking staff progress?

H_0 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is not different after the implementation of the Training Home program.

H_a 5: When using the Training Home program, supervisors report that the tracking of employee training, the evaluating of employee training, the tracking of certifications, and the tracking of staff progress is different.

The majority of supervisors replied that the Training Home program was advantageous for tracking employee progress with certifications and with assigned training. However, that margin narrowed when asked about the Training Home program's improvements for staff evaluation. A reasonable explanation for this finding is that supervisors mainly evaluate staff on job performance as opposed to training. Training is simply one part of an overall evaluation, and it may be one of the smallest parts of that evaluation in the minds of some supervisors.

Research Question 6

RQ 6: What is the usage of Training Home versus informal training methods?

*H*o 6: The usage of Training Home is not different from the use of informal training methods.

H_a 6: The usage of Training Home is different than the use of informal training methods.

The data analysis demonstrated the result that the Training Home program supports the alternative hypothesis. The majority of staff are formally trained. The ultimate goal should be 100% of staff are trained formally, but in an organization like the national nonprofit in which there are many different types of job functions, such comprehensive formal training may not be possible. However, it is clear that the Training Home program became a significant training vehicle in a short amount of time. Overall, the data indicate that supervisors and staff found the program to be beneficial, costs for training dropped, staff spent more time in training, and the amount of formal training increased. The Training Home program was successful in all critical

areas of measurement, which indicates that the Training Home program met the expectations of the organization and its use should continue.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

The Training Home program is an online learning tool for training and education. Online learning is a relatively new phenomenon because only in recent history has there been the technology and internet bandwidth to support such a style of program. This new technology provides an opportunity to evaluate the effectiveness of online training in comparison to more traditional training systems.

From a review of the literature, it is clear that businesses have typically improved their training programs based on the current state of knowledge and technology, which has led to improvements in overall operations management and production efficiency. Recently, advancements in technology have been used to advance training and education such that there are now significant numbers of people who take advantage of online learning. For instance, the government of India has invested in online learning infrastructure for the entire country of more than a billion citizens (Geetha et al., 2017). In the United States, a Stanford study has reported that many prisons are moving to online learning models, which can allow them to be unburdened by budget constraints while reducing recidivism rates by as much as 43% (van Velzen, 2017). These two examples support eLearning as a tool that has gained in popularity and use.

The theoretical framework for this study and the design of the Training Home program represent a combination of the checklist procedure with the NPT. This procedure and theory have provided the basis for the Training Home program. As discussed earlier, the NPT avers that in order to create a replicable output, there must be consistent input. Accordingly, consistent input should produce more consistent results (Thompson & Smith, 2009). The checklist procedure creates the repeatable, consistent, and replicable input that is essential for creating the desired consistent output (Baylis, Collins, & Coleman, 2011). This notion translates well into the

online learning format because all training and content become static when formatted digitally. The formats also now come with built-in analytics that can identify the employee who accesses the training, the time it was accessed, and the length of training time.

Additionally, the program can provide usage patterns and query the users for answers. The result of these features is that data is gathered faster than ever before, and changes or updates can be implemented efficiently by an instructor or organization as needed. Such enhancements make online learning a powerful tool.

Summary of the Results

The Training Home program was found to be helpful for employees and supervisors. The employees of the national nonprofit reported it to be useful and helpful in learning job functions and becoming more educated about the organization of the national nonprofit. Supervisors found Training Home to be a valuable tool for monitoring worker certifications and compliance with assigned training modules. In addition to being used with all levels of staff, the program lowered the cost per unit of training while delivering more units of training over a 12-month period. These findings indicate that organizations can benefit from the use of the Training Home program.

Discussion of the Results

Six research questions have explored the staff perceptions and cost efficiency of the Training Home program. The study can be broken down into four primary areas: sample demographics, staff responses, business metrics around cost and amount of training delivered, and supervisor perceptions of the capabilities of the program. The results of all four areas are positive and further discussed below.

Sample Demographics

The Training Home program aims to be equally useful for all groups of employees. Therefore, the effectiveness of training is examined by gender, education, job status, and age. There were no significant results to indicate that the Training Home program was more effective for any gender. However, the staff with higher levels of education reported greater helpfulness of Training Home. This result may be explained by age, as most full-time staff are older and most seasonal or part-time workers are typically still in high school or college. A secondary explanation may be that full-time staff had more access to Training Home than either the seasonal or part-time staff so that the full-time staff may have developed a deeper knowledge of the program. In future research, a sample of a larger staff group may clarify the underlying cause of this result. Lastly, there were no significant differences by age in the reported levels of the program's helpfulness. Ultimately, the findings show that Training Home is considered useful across all demographic variables and is even more useful for those with higher education levels.

Staff Response

Another objective of the Training Home implementation was to be accepted by the staff as a valuable tool for learning about job functions and the national nonprofit. To examine the fulfillment of this objective, researchers created a variable that separated the respondents into those who had used Training Home and those who had not. The research questions were designed to measure if the respondents had increased levels of training for their job functions, improved personal knowledge of the national nonprofit, or a positive perception of the Training Home program. There were significant differences between those who had used Training Home and those who had not in all of the three areas. It was interesting to note that staff who had not used Training Home still reported that the program could be helpful in job function training and

improving their knowledge about the national nonprofit. This results from positive verbal reviews from the staff who did use Training Home, as well as personal observations of the program.

In general, staff reported that the Training Home online learning program was a valuable tool. This report of value aligns with other recent studies that have found online learning to be gaining in usefulness and popularity. A 2017 study has supported these results with its finding that employees enjoy online training because it can be completed at any time and customized to personal needs (Majumdar, 2017). Even nurses, who provide hands-on care, have reported that online learning was useful and helped enhance personal skill sets (Lewis et al., 2016). The nurses in that study specified that they would prefer more online learning in the future to ensure their nursing skillset is kept current and to learn new techniques. In Germany, a study of self-directed online learning shows that medical students perform better with online learning in the curriculum (Peine, Kabino, & Spreckelsen, 2016). Not only do these studies support that online learning is growing as a platform to deliver new training models, but also three distinct studies have reported that online learning can help to enhance education. The Training Home program also achieves this result for national nonprofit staff. At Site 1 of the national nonprofit, the staff members have the opportunity to take training in other departments via Training Home with the benefit of working extra hours in that department. The ability to work in multiple departments can lead to promotions and career advancement in the national nonprofit. This flexibility and ability to grow may have also been part of the positive responses from staff to Training Home and would seem to echo the results of the studies listed above.

Business Metrics

Another goal of the Training Home program was to deliver more training at a lower cost. The metrics considered for this portion of the study were the cost per unit of training and the time spent in training. Training cost per unit is an essential component of budgeting, and staff time spent in training equates to money spent on salaries; the lower the cost per unit of training delivered, the more efficient the budget. The literature review demonstrates that training was often eliminated from budgets during the last recession to save money (Mailepors, 2009; Morreale, 2011). The elimination of training indicates that the cost of training is an important budgetary consideration, even despite the numerous studies that have found that the cost of employee turnover is an important consideration and that training enhances the value of a company (Hester, 2013; Lawler, 2015). This juxtaposition implies that training dollars are valuable, but not mandatory to preserve. Therefore, the unit cost per training is important.

If the unit cost of training is important, then a material reduction in training costs while providing an increase in the quantity of training is a desirable outcome. The results are thus significant in this case. A significant result in business is measured by *materiality*, an accounting term defined by the Generally Accepted Accounting Principles (Financial Accounting Standards Board, 2015). In this case, there were material savings per unit of training. The initial cost before Training Home was $46.56, and this cost dropped to $2.48 per unit of training delivered with Training Home. This level of change is meaningful for any organization that has limited funds.

The next metric considered was the time spent in training. The literature review has also indicated that time spent in training is essential to staff for keeping skills updated (Dirani, 2011), complying with regulations (Training Today, 2016), and having a positive effect on an organization's performance (Molina & Ortega, 2003). Time spent in training was measured in

two ways. The first is the number of extra hours paid for training, and the second is the number of training sessions given. The human resources department of Site 1 reported that the number of hours paid for training rose from 525 hours before implementation of Training Home to 1,007 in the second year of implementation. It is important to note that the staff also have training during the regular workday, which is part of the budgeted salaries. The reported number represents the hours staff spent in training outside of their regularly scheduled hours. Secondarily, training sessions delivered increased from 897 units in the year before the implementation of Training Home to 4,092 delivered in the first year, and this number further increased to 17,000 units delivered in the second year. This notable rise highlights that the Training Home program was successful in delivering more units of training.

The two metrics imply that the Training Home program is valuable from a budgetary point of view. A 2009 study of educational training programs in Boston and New York reported that there was a significant positive impact for the budget of the programs when using online training in combination with traditional face-to-face training (Marquart & Rizzi, 2009). Additionally, a 2017 study by the University of Georgia has suggested that online learning is an excellent solution for providing nutrition education programs to a low-income audience in a budget-effective manner (Stotz et al., 2017). This study was initiated because the state of Georgia did not have a budget large enough to meet the needs of the program, but an online learning solution was able to meet the educational needs within the limited budget. Overall, the literature and the Training Home study have shown that online learning is capable of delivering large amounts of training in a cost-efficient manner.

Supervisor Results

Training Home is also intended to be a tool for supervisors to track employee training, certifications, and compliance because the tracking and support of employee progress are important aspects of employee evaluation and development. The results of the tracking capabilities were measured by supervisors' responses to determine if Training Home eases the process of tracking of employee progress with certifications, evaluating employees, and tracking employee compliance with the assigned training. The tracking capability is essential because the sooner a supervisor can intervene and support employees or learners, the more successful the individual may be (Paterson, Luthans, & Jeung, 2014). A 2015 meta-analysis of 8,199 nursing students found that supervisors' early input and support that encompassed key aspects of work were constructive in the transition from student to nurse and from being a nurse to a being supervisor (Edwards, Hawker, Carrier, & Rees, 2015). Moran et al. (2014) have also found that support from a supervisor and continued training are critical factors in retaining staff who worked in a rural area. Staff and learners want feedback and support, which in turn engenders longevity and success at the workplace.

In this study, supervisors reported that Training Home eased the task of tracking training, certifications, and employee progress. Furthermore, 57% of supervisors also reported the Training Home system would make employee evaluations easier than the old system. Ultimately, this group of supervisors believed the program to be a useful tool for supervision. As discussed earlier, the ability to deliver programs and supervision in a low-cost manner is critical for budget considerations. Studies have indicated that students, as well as staff, can thrive in conditions in which support and supervision from an online learning environment exist (Edwards et al., 2015; Moran et al., 2014). This past research supports the findings that the supervisors who used

Training Home found it to be a helpful tool and that staff thrives in a learning environment (Peluso, 2017).

Conclusions Based on the Results

Nonprofit organizations traditionally have budgets which focus on mission delivery, and nonprofits must maximize human capital to deliver that mission (Internal Revenue Service, 2016). In this way, program and operational behaviors that can enhance a nonprofit's ability to deliver its mission more cost-effectively should be considered. The efficient use of money and the application of a sound budget are important in any business. This study's data demonstrates that Training Home delivered more units of training per employee, saved on costs, and was found to be useful for both employees and supervisors. These outcomes serve as a clear indication of the success of the Training Home program.

Nonprofits have an obligation to donors and to the government to operate efficiently, less the nonprofit risk losing donors and its nonprofit tax status. Therefore, it is logical to assume that a program that can improve the delivery of training efficiently and reduce the associated costs should be well received in the nonprofit business community. Nonprofit organizations do not always have the same resources as the for-profit community (Ben-Ner & Ren, 2015; Maier, Meyer, & Steinbereithner, 2015), but they still must operate as businesses and therefore carry an expectation from the community of operating as efficiently as possible within the constraints of those limited resources. The stated goal of the 501(c) tax exemption is to replace the burden of government in the social sector (Internal Revenue Service, 2016). With this caveat in mind, a nonprofit organization needs to be considered as resourceful as possible to be attractive to donors, volunteers, and granting agencies.

The results of this study can impact the nonprofit community in the entire United States. The national nonprofit that was used for this study is a federated organization that operates in more than 10,000 communities. This widespread nature has two consequences: this national nonprofit has the capacity to build a significant library of resources around training, and other organizations look to this large nonprofit as a leader and role model. For these reasons, the ultimate result of this study is that the Training Home program can positively change the training dynamics for any affiliate branch and act as a model training program for other nonprofit organizations.

Limitations

Nonprofit organizations traditionally have budgets which focus on mission delivery, and nonprofits must maximize human capital to deliver that mission (Internal Revenue Service, 2016). In this way, program and operational behaviors that can enhance a nonprofit's ability to deliver its mission more cost-effectively should be considered. The efficient use of money and the application of a sound budget are important in any business. This study's data demonstrates that Training Home delivered more units of training per employee, saved on costs, and was found to be useful for both employees and supervisors. These outcomes serve as a clear indication of the success of the Training Home program.

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Implications for Practice

Affiliate branches of the national nonprofit used in this study across the country could benefit from the use of this program for their staff's professional development. Presently, the affiliate site (Site 1) of the national nonprofit has a professional development program. The national nonprofit employees are expected to achieve various levels of professional development based on their job status or position within the organization. For example, a member affiliate of this national nonprofit is placed on probationary status if the CEO does not have internal training that provides an *Organizational Leader* certification level. The CEOs obtain this level by attending a mandated series of classes and maintaining 250 hours of continuing education credits every five years. The credits are not difficult to acquire, but consistent work must be undertaken

to stay current. The national nonprofit is quite serious about certifications, as evidenced by the organization's requirement that a CEO must have them or risk losing the charter for that affiliate branch. The national nonprofit has three levels of professional certification, with the organizational leader as the highest. The Training Home program can track and support employee completion of the many required certifications.

The Training Home program is also very important for the training and promotion of the staff members who are not on the professional track. The national nonprofit used in this study has approximately 450 staff members, but for Site 1, leadership certifications would only be appropriate for approximately 40 people employed there, or 10% of the staff. Other types of certifications affect the broader staff group, such as lifeguarding, personal training, childcare, and camp counselor training. However, none of these types are codified into a bundled model like the Site 1 certifications. Nationally, no system currently tracks local member affiliate training, the national nonprofit parent organization training, and governmental required training or certifications.

Consequently, local member affiliates must try to maintain three separate databases for staff training. These separate databases are an important issue because staff can take more than 100 training programs offered by the national nonprofit parent organization, with only a few that relate to the management-level certifications. Overall, this means that 90% of employees at a member affiliate and 100% of volunteers may never take a training session from the national nonprofit parent organization. Part of the problem with the current national nonprofit training model is that it includes no mandate for the training of volunteers (90% of the staff). Moreover, no efficient and comprehensive delivery method currently exists for training, but the Training Home program has the potential to alleviate this issue.

With the Training Home program implementation at Site 1, a new staff member can receive a suite of training options from the national nonprofit parent organization, the local member affiliate (Site 1), state, county, city, insurance company, CDC, local school district, or any combination of agencies with just one delivery program. The Training Home program can be used to train for specific job duties for each staff and volunteer, and the program can create an appropriate list of training for each specific position. The training for any staff member can be reviewed by management to decide what is specific to the site versus what is the same for every employee across the country. For example, a member affiliate branch of the national nonprofit needs to have an opening and closing procedure that is specific to the local building, but training to provide excellent customer service is consistent across all member affiliates of the national nonprofit across the country. This same delivery model can be applied to any federated nonprofit organization across the country such as the United Way, Boys and Girls Club, YWCA, Humane Society, and Make-A-Wish. The Training Home program is also applicable to the for-profit world. Consider the fast-food market, for example, which must deliver a distinct product in the same manner at every outlet across the United States.

Recommendations for Further Research

The first recommendation for future studies is to determine if this program is as useful in a for-profit environment. The focus of this study has been to evaluate the Training Home program and determine if it was an effective tool for use in a nonprofit environment; however, other studies have provided support for the notion that both for-profit and nonprofit organizations use the same management tools (Maier et al., 2015). The common factors indicate that if this program works well for a nonprofit organization, it may also work well in the for-profit sector.

The second recommendation is to test a larger sample group to determine the validity of the initial survey study. This task can be accomplished by using and testing Training Home at a larger national nonprofit member affiliate than Site 1 with a more ethnically diverse population.

The third recommendation is to create a specific survey that asks questions based on the research questions. The data for this study was secondary data, so the analyses restricted by existing survey data. A new survey should be created and checked for validity (Visser, Krosnick, & Lavrakas, 2017). A follow up survey piloted at a larger member affiliate would be useful for triangulating the results of this study.

Conclusion

Nonprofits are in a precarious situation because of minimal resources. If a nonprofit does not fulfill its stated mission efficiently, then the organization risks losing the support of the community and failing to deliver on that mission. Furthermore, nonprofit organizations can quickly become irrelevant if they do not remain focused on fulfilling the needs of the community; when the nonprofit fails to live up to its promises, it may no longer receive donations, grants, or support. If nonprofits do not receive support from the community, then the IRS can revoke its nonprofit status (Internal Revenue Service, 2016). For a nonprofit to deliver on its missions, nonprofits need to have staff that can work effectively in a resource-poor environment (Maier et al., 2015). The Training Home program can help to provide staff with the skills needed to operate in the nonprofit setting.

An analysis of the literature supports the notion that businesses need to train staff, as training has a positive impact on the business and adds value to the organization (Jurkiewicz & Brown, 2000). Training positively affects staff satisfaction (Al-Zoubi, 2012) and customer satisfaction (Toporek, 2013), and it is an indicator of future success for the organization (Council

for Economic Education, 2015). The Training Home program can positively enhance the training model for the national nonprofit used in this study, which makes it worthy of widespread implementation, as it could bring greater success to any organization that uses it effectively. The results indicate that Training Home added value to the operations of Site 1 for the national nonprofit. Based on these results, the Training Home program could be valuable for all member affiliates of the national nonprofit.

REFERENCES

Adade, A. K. (2012). *Reaching the adult learner: Teaching information technology infrastructure library (ITIL) to practicing technology managers* (Doctoral Dissertation). Retrieved from ERIC https://eric.ed.gov/?q=itil&id=ED549428. (ISBN 978-1-2673-2148-0)

Alshare, K. A., Freeze, R. D., Lane, P. L., & Wen, H. J. (2012). The impacts of system and human factors on online learning systems use and learner satisfaction. *Decision Sciences: Journal of Innovative Education*, *9*(3), 437-461. doi:10.1111/j.1540-4609.2011.00321.x

Al-Zoubi, M. T. (2012). Generating benchmarking indicators for employee job satisfaction. *Total Quality Management*, *23*(1), 27-44. doi:10.1080/14783363.2011.637780

American Management Association. (2014, June 6). *Training the Ritz Carlton way*. Retrieved from http://www.amanet.org/training/articles/Training-the-Talented-the-Ritz-Carlton-Way.aspx

Applebaum, S. H., Habashy, S., Malo, J.-L., & Shafiq, H. (2012). Back to the future: Revisiting Kotter's 1996 change model. *The Journal of Change Management*, *31*(8), 764-782. doi:10.1108/02621711211253231

Association of American Publishers. (2015, February 16). *Annual Report 2005.* Retrieved from http://www.publishers.org/industry/2005-S1FINAL.pdf

Bandura, A. (1997). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191-215. doi:10.1037/0033-295X.84.2.191

Baylis, P. J., Collins, D., & Coleman, H. (2011). Child alliance process theory: A qualitative study of a child-centered therapeutic alliance. *Child Adolescence Social Work Journal*, *28*(2), 79-95. doi:10.1007/s10560-011-0224-2

Ben-Ner, A., & Ren, T. (2015). Comparing workplace organization design based on the form of ownership: Nonprofit, for-profit, and local government. *Nonprofit and Voluntary Sector Quarterly*, *44*(2), 340-359. doi:10.1177/0899764013512422

Bensen, S. G., & Dundis, S. P. (2003). Understanding and motivating healthcare employees: Integrating Maslow's hierarchy of needs, training, and technology. *Journal of Nursing Management*, *11*(5), 315-320. doi:10.1046/j.1365-2834.2003.00409.x

Berkowitz, R., Bowen, G., Benbenishty, R., & Powers, J. D. (2013). A cross-cultural validity study of the school success profile learning organization measure in Israel. *Children & Schools*, *35*(3), 137-146. doi:10.1093/cs/cdt010

Bernotavicz, F., McDaniel, N. C., Brittain, C., & Dickinson, N. S. (2013). Leadership in a changing environment: A leadership model for child welfare. *Administration in Social Work, 37*, 401-417. doi:10.1080/03643107.2012.724362

Birdi, K. S., Patterson, M. G., & Wood, S. J. (2007). Learning to perform? A comparison of learning practices and organizational practices in profit and non-profit making sectors in the UK. *International Journal of Training and Development, 11*(4), 265-281. doi:10.1111/j.1468-2419.2007.00285.x

Blackbaud. (2017, October 16). *Blackbaud homepage.* Retrieved from https://www.blackbaud.com/

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*, 246-263. doi:10.1111/j.1467-8624.2007.00995.x

Bloom, B. S., Engelhart, M. D., Furst, F. J., Hill, W. H., & Krathwold, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive Domain.* New York, NY: David McKay Company.

Board Source. (2016, December 3). *Duties of a CEO.* Retrieved from http://www.boardsource.com

Boeree, C. G. (2006). *Abraham Maslow*. Shippensburg University. Retrieved from http://webspace.ship.edu/cgboer/Maslow.html

Boeree, C. G. (2009). *The ancient Greeks, part two: Socrates, Plato, and Aristotle*. Shippensburg University. Retrieved from http://webspace.ship.edu/cgboer/athenians.html

Bolton, B. (2007). *Houston front desk training survey.* Houston, TX

Boritz, J. E. & Timoshenko, L. M. (2014). On the use of a checklist in auditing: A commentary. *Current Issues in Auditing, 8*(1), 1-25. doi:10.2308/ciia-50741

Bosk, C. L., Dixon-Woods, M., Goeschel, C. A., & Pronovost, P. J. (2009). The art of medicine: Reality check for checklists. *The Lancet, 374*, 444-447. doi:10.1016/S0140-6736(09)61440-9

Brookfield, S. D. (1991). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices.* New York, NY: Jossey-Bass.

Brookfield, S. D. (2013). *When the black dog barks: Building a research and theoretical agenda for adult learning in and on clinical depression.* Adult Education Research Conference Papers. Retrieved from http://www.stephenbrookfield.com/aerc-papers/

Bryner, J. (2007, April 17). *Survey reveals most satisfying jobs.* Retrieved from http://www.livescience.com/1431-survey-reveals-satisfying-jobs.html

Buscombe, C. (2013). Using Gagne's theory to teach procedural skills. *Learning and Teaching Clinical Skills*, *10*(5), 302-307. doi:10.1111/tct.12051

Capterra. (2014). *Top learning management systems software*. Retrieved from https://www.capterra.com/learning-management-system-software/#infographic

Centers for Disease Control and Prevention. (2016). *Heads up concussion*. Retrieved from https://www.cdc.gov/headsup/youthsports/training/index.html

Centers for Disease Control and Prevention. (2017). *A framework for program evaluation*. Retrieved from http://www.cdc.gov/eval/framework/

Chapman, R., Buckley, L., & Sheehan, M. (2011). The development of the extended adolescent injury checklist. *Youth Studies Australia*, *30*(1), 49-58. Retrieved from https://eprints.qut.edu.au/41182/1/41182.pdf

Chartered Institute for Personnel Development. (2009). *Learning and Development: Annual Survey Report 2009.* London, England: Chartered Institute of Personnel and Development Publishing.

Childress, C. C., & Friedkin, N. E. (1977). Cultural reception and production: The social construction of meaning in book clubs. *American Sociological Review*, *77*(1), 45-68. doi:10.1177/0003122411428153

Clark, D. (2010). Big dog, little dog performance juxtaposition. *The grandfather of business books.* Retrieved from http://www.nwlink.com/~donclark/hrd/history/peters.html

Cocklin, J. T. (2004). Swissair 111 human factors: Checklists and cockpit communication. *Journal of Air Transportation*, *9*(3), 19-42. Retrieved from https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20040139262.pdf#page=26

Coker, C. J. (2009). *Training within the national nonprofit.* (Unpublished Master's Thesis) Springfield College, Springfield, MA.

Collins, J. (2001). *Good to great: Why some companies make the leap . . . and others don't.* . New York, NY: Harper Business.

Collins, J. (2005). *Good to great and the social sectors: Why business thinking is not the answer.* New York, NY: Harper Collins.

Collins, J. (2014, May 16). *Thoughts on organizations.* Presented at a Rotary meeting.

Colorado Department of Education. (2013, April 15). *Colorado quality standards for early childhood care and education services.* Retrieved from http://www.cde.state.co.us/cpp/qualitystandards

Comenius Foundation. (2015, February 20). *Comenius biography*. Retrieved from http://comeniusfoundation.org/pages/why-comenius/comenius-biography.php

Council for Economic Education. (2015, April 7). *Henry Ford and the Model T: A case study in productivity.* Retrieved from http://www.econedlink.org/lessons/index.php?lid=668&type=student

Cramer, M. (2010, January 8). *Management theory of Rensis Likert*. Retrieved from http://www.business.com/management/management-theory-of-rensis-likert-key-terms/

Crawford, M. (2016, March 1). What banks can learn from Maslow's hierarchy of needs. *American Banker*. Retrieved from https://www.americanbanker.com/opinion/what-banks-can-learn-from-maslows-hierarchy-of-needs

Darvish, H., Mohammadi, M., & Afsharpour, P. (2012). Studying the knowledge management effect of promoting the four balanced scorecard perspectives: A case study at SAIPA automobile manufacturing. *Economic Insights - Trends and Challenges*, *64*(1), 9-23. Retrieved from http://www.upg-bulletin-se.ro/archive/2012-1/2.%20Darvish_Mohammadi_Afsharpour.pdf

Dewey, J. (1897). *My pedagogic creed.* Chicago, IL: University of Chicago.

Dirani, K. M. (2011). Professional training as a strategy for staff development: a study in training transfer in the Lebanese context. *European Journal of Training and Development, 36*(2-3), 158-178. doi:10.1108/03090591211204698

Eaglen, A., Lashley, C., & Thomas, R. (2000). The benefits of training in leisure retailing: A case study of McDonald's restaurants. *Strategic Change, 9*(6), 333-345. doi:10.1002/1099-1697(200009/10)9:6<333::AID-JSC505>3.0.CO;2-7

Economist. (2008, November 3). The Hawthorne Effect. *The Economist.* Retrieved from https://www.economist.com/node/12510632

Edwards, S., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies*, *52*(7), 1254-1268. doi:10.1016/j.ijnurstu.2015.03.007

Ellis: Partners in Mystery Shopping. (2014). *Ritz-Carlton's gold standard service.* Retrieved from http://www.epmsonline.com/wp-content/uploads/2011/09/articles/RitzCarltonGoldStandardService.pdf

Faruk, S. (2012). The mediating effect of leader-member exchange on the relationship between Theory X and Y management styles and affective commitment: A multilevel analysis. *Journal of Management and Organizations*, *18*(2), 159-174. doi:10.1017/S1833367200000936

Federal Aviation Administration. (2014a). *Aviation safety*. Retrieved from http://www.faa.gov/about/office_org/headquarters_offices/avs/

Federal Aviation Administration. (2014b). *Flight standards service*. A report from aircraft maintenance division. Retrieved from https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs300/

Festenstein, M. (2018). Dewey's political philosophy. *The Stanford Encyclopedia of Philosophy* (Fall 2018 Edition), Edward N. Zalta (ed.). Retrieved from https://plato.stanford.edu/entries/dewey-political/

Field, A. (2009). *Discovering statistics using SPSS.* London, England: SAGE Publications.

Financial Accounting Standards Board. (2015). *2015 U.S. generally accepted accounting principles: Financial reporting taxonomy*. Retrieved from http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176164649716

Fine, V. (2011), Economic Recession Continues to Hit Nonprofits Hard. *Huffpost.* Retrieved from https://www.huffingtonpost.com/2011/03/22/nonprofits-continue-to-fe_n_838855.html

Fitch, D., & Jagolino, N. C. (2012). Examining organizational functioning through the lens of complexity theory using system dynamics. *Journal of Social Service Research*, *63*(7), 591-604. doi:10.1080/01488376.2012.721285

Ford Manufacturing Company. (2014). *New goals for flexible advanced manufacturing*. Retrieved from https://corporate.ford.com/innovation/100-years-moving-assembly-line.html

Franchise Chatter. (2014, January 27). *Franchise Chatter: What Investors Need to Know about the Chick-fil-a franchise*. Retrieved from http://www.franchisechatter.com/2014/01/27/franchise-chatter-guide-chick-fil-a-franchise-is-a-coveted-enterprise-for-just-the-right-franchisees/

Gagne, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). Belmont, CA: Wadsworth Publishing Company.

Gandhi, S. O. (2012). Differences between non-profit and for-profit hospices: patient selection and quality. *International Journal of Health Care and Finance*, *12*(2), 107-127. doi:10.1007/s10754-012-9109-y

Gardner, H. (2011). *Frames of mind* (3rd ed.). New York, NY: Basic Books.

Garvin, D. A. (1993). Building a learning organization. *Harvard Business Review, 71*(4), 47-80. Retrieved from https://hbr.org/1993/07/building-a-learning-organization

Gawande, A. (2010). *The checklist manifesto: How to get things right.* London, England: Profile Books.

Geetha, P., Cherukulath, W. K., & Sivakumar, R. (2017). Facilitating e-learning through National Knowledge Network. *DESIDOC Journal of Library & Information Network, 37*(2), 91-97. Retrieved from https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/10958

Glaeser, E. L. (2009, November 3). Want a stronger democracy? Invest in education. *The New York Times.* Retrieved from https://economix.blogs.nytimes.com/2009/11/03/want-a-stronger-democracy-invest-in-education/?_r=0

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*(4), 597-607. Retrieved from https://nsuworks.nova.edu/tqr/vol8/iss4/6/?&sa=U&ei=ysMjVIynMZHd7Qay44H4DQ&ved=0CEEQFjAI&usg=AFQjCNFpuZ6PjJRw2DDeLP5vBVIRU5O79A/

Goldfield, B. (2011, April 19). Employee development through reading: Start a book club. *Forbes Magazine.* Retrieved from http://www.forbes.com/sites/burtongoldfield/2011/04/19/employee-development-through-reading-start-a-book-club/

Greens, K. (2014). The rules of replication. *The Scientist*, 1-3. Retrieved from https://www.the-scientist.com/careers/the-rules-of-replication-36493

Grigg, E. (2015). Smarter clinical checklists: How to minimize checklist fatigue and maximize clinician performance. *Anesthesia & Analgesia, 121*(2), 570-573. doi: 10.1213/ANE.0000000000000352

Gurwitz, K. T., Aron, S., Panji, S., Maslamoney, S., & Fernandes, P. L. (2017). Designing a course model for distance-based online bioinformatics training in Africa: The H3ABioNet experience. *PLOS Computational Biology, 13*(10), e1005715. doi:10.1371/journal.pcbi.1005715

Halamachi, A., & Woron, A. M. (2013). Spontaneous inter-organizational learning. *International Journal of Organization Theory and Behavior, 16*(2), 135-164. doi:10.1108/IJOTB-16-02-2013-B001

Harvard Business School. (2012). Baker library historical collections. Retrieved from http://www.library.hbs.edu/hc/hawthorne/intro.html#i

Hersch, M. H. (2009). Checklist: The secret life of Apollo's fourth crewmember. *Sociological Review*, *57*(1), 1-24. doi:10.1111/j.1467-954X.2009.01814.x

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work.* New York, NY: John Wiley.

Hester, J. (2013). The high cost of employee turnover and how to avoid it. *Nonprofit World*, *31*(3), 20-21. Retrieved from https://www.snpo.org/redir/articles.php?id=1977

Higgins, J. (2005). Chapter 4: Introduction to multiple regression. *The radical statistician: Unleashing the power of applied statistics in the real world.* Retrieved from http://www.biddle.com/documents/bcg_comp_chapter4.pdf

Holtzhausen, S. (2001). Triangulation as a powerful tool to strengthen the qualitative research design: The Resource-based Learning Career Preparation Programme (RBLCPP) as a case study. *Proceedings of the Higher Education Close Up Conference #2.* Lancaster, England: Lancaster University.

Horn, W. (2000). *An overview of customer satisfaction models.* Presented at the Annual Meeting of the Research and Planning Group for California Community Colleges (38th, Pacific Grove, CA, April 26-28th, 2000), Retrieved from http://archive.rpgroup.org/system/files/An%20Overview%20of%20Customer%20Satisfaction%20Models.pdf

House, R. J., Filley, A. C., & Gujarati, D. N. (1971). Leadership style, hierarchical influence, and the satisfaction of subordinate role expectations: A test of Likert's influence proposition. *Journal of Applied Psychology*, *55*(5), 422-432. doi:10.1037/h0031775

Instructional Design Central. (2012). What is instructional design? Retrieved from http://www.instructionaldesigncentral.com/htm/IDC_instructionaldesigndefinitions.htm

Internal Revenue Service. (2016). *501(c) 3. Tax Information for Charitable Organizations.* Retrieved from https://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-section-501c3-organizations

International Atomic Energy Agency. (2001). *Risk management: A tool for improving nuclear power plant performance.* Vienna, Austria: International Atomic Energy Agency. Retrieved from https://www-pub.iaea.org/MTCD/Publications/PDF/te_1209_prn.pdf

International Business Machine (n.d.). IBM SPSS Software. Retrieved from https://www.ibm.com/analytics/us/en/technology/spss/

International Centre for Educators Learning Styles. (2015). *David A. Kolb's experiential learning theory and learning styles inventory.* Retrieved from https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1123&context=slceslgen

Ismail, A., Nik Daud, N. G., & Madrah, H. (2011). Relationship between career program characteristics and job satisfaction in a based local authority. *Alexandru Ioan Cuza Annals, 58,* 270-280. Retrieved from https://www.researchgate.net/publication/228462918_RELATIONSHIP_BETWEEN_CAREER_PROGRAM_CHARACTERISTICS_AND_JOB_SATISFACTION_IN_A_CITY_BASED_LOCAL_AUTHORITY

James, L., & Mathew, L. (2012). Employee retention strategies: IT industry. *Journal of Indian Management, 9*(3), 79-87. Retrieved from http://www.academia.edu/download/30315431/scms_journal_july-september_2012.pdf#page=81

Jimmieson, N. L., & White, K. M. (2011). Predicting employee intentions to support organizational change: An examination of identification processes during a re-brand. *British Journal of Social Psychology, 50*(2), 331-341. doi:10.1111/j.2044-8309.2010.02005.x

Jones, S. R. (1992). Was there a Hawthorne effect. *American Journal of Sociology, 98*(3), 451-468. doi:10.1086/230046

Jou, Y. T., Lin, C. J., Yenn, T. C., Yang, C. W., Yang, L. C., & Tsai, R. C. (2009). The implementation of a human factors engineering checklist for human systems interfaces upgrade in nuclear power plants. *Journal of Safety Science, 47*(7), 1016-1025. doi:10.1016/j.ssci.2008.11.004

Jung, C. S., & Lee, S. Y. (2015). The Hawthorne studies revisited: Evidence from the U.S. federal workforce. *Administration & Society, 47*(5), 507-531. doi:10.1177/0095399712459731

Jurkiewicz, C. L., & Brown, R. C. (2000). The P/E ratio that really counts. *Journal of Power and Ethics, 1*(3), 172-186. Retrieved from https://www.questia.com/library/journal/1G1-76736042/the-p-e-ratio-that-really-counts

Kauffman, T. (2013, October 9). *Why are U.S. nuclear plants better prepared for emergencies than Fukushima? Here's a checklist* [Blog post]. Retrieved from http://neinuclearnotes.blogspot.com/2013/10/why-are-us-nuclear-plants-better.html

Keller, F. S. (1968). "Goodbye, teacher..." *Journal of Applied Behavior, 1*(1), 79-89. doi:10.1901/jaba.1968.1-79

Kiel, J. (1999). Reshaping Maslow's hierarchy of needs to reflect today's educational and managerial philosophies. *Journal of Instructional Psychology*, *26*(3), 167-170. Retrieved from https://www.linkedin.com/pulse/reshaping-maslows-hierarchy-needs-reflect-todays-dr-rushein-delwash

Kirkpatrick, D. (1994). *Evaluating training programs: The four levels.* San Francisco, CA: Berrett-Koehler.

Kirkpatrick, D. (1996). Great ideas revisited. *Human Resource Development: Training and Development*, *50*(1), 54-59. Retrieved from http://go.galegroup.com/ps/anonymous?id=GALE%7CA18063280&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=10559760&p=AONE&sw=w

Kirkpatrick Partners. (2015). The Kirkpatrick model. Retrieved from https://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy.* Englewood Cliffs, NJ: Cambridge Adult Education.

Koenig, R. (2016, April 19). Lack of training for young nonprofit workers means too few potential leaders. *Chronicle of Philanthropy*. Retrieved from https://www.philanthropy.com/article/Lack-of-Training-for-Young/236164

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Newark, NJ: Prentice Hall.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *IEEE Engineering Management Review*, *37*(3), 1-18. Retrieved from https://oupub.etsu.edu/125/newbudgetprocess/documents/leading_change_why_transformation_efforts_fail.pdf

Laerd Dissertations. (2017). Reliability in research. Retrieved from http://dissertation.laerd.com/reliability-in-research.php#first

Latif, K. F. (2012). An integrated model of training effectiveness and satisfaction with employee development interventions. *Industrial and Commercial Training*, *44*(4), 211-222. Retrieved from https://www.emeraldinsight.com/doi/abs/10.1108/00197851211231487

Lawler, E. (2015, July 21). Rethinking employee turnover. *Forbes*. Retrieved from https://www.forbes.com/sites/edwardlawler/2015/07/21/rethinking-employee-turnover/#2350fd47e693

Learning Organization. (n.d.). *Business dictionary*. Retrieved from http://www.businessdictionary.com/definition/learning-organization.html

Learning Theories. (2019). *Classical Conditioning, Pavlov.* Learning Theories. Retrieved from https://www.learning-theories.com/classical-conditioning-pavlov.html

Lewin, K. (1939). Field theory and experiment in social psychology: Concepts and methods. *American Journal of Sociology, 44*(6), 868-896. Retrieved from https://www.journals.uchicago.edu/doi/pdfplus/10.1086/218177

Lewis, C. A. (2016). *Exploring internship supervision in non-profit organizations.* Thousand Oaks, CA: California Lutheran University.

Lewis, P., Tutticci, N., Douglas, C., Gray, G., Osborne, Y., Evans, K., & Nielson, C. (2016). Flexible learning: Evaluation of an international distance education programme designed to build the learning and teaching capacity of nurse academics in a developing country. *Nurse Education in Practice, 21,* 59-65. doi:10.1016/j.nepr.2016.10.001

Likert, R. (1932). A technique for the measurement of attitudes. *Archive of Psychology, 22*(140), 5-55. Retrieved from https://legacy.voteview.com/pdf/Likert_1932.pdf

Lindeman, E. C. (1961). *The meaning of adult education.* New York, NY: Harvest House.

Locke, J. (1824). An essay concerning human understanding. In *The Works of John Locke in Nine Volumes,* (12th ed.) Vol. 1. Retrieved from https://oll.libertyfund.org/titles/761

Lundberg, C., Gudmundson, A., & Andersson, T. D. (2009). Herzberg's two-factor theory of work motivation tested empirically on seasonal workers in hospitality and tourism. *Tourism Management, 30*(6), 890-899. doi:10.1016/j.tourman.2008.12.003

Magness, S. (2012, September 20). *A brief history of training.* Retrieved from http://www.slideshare.net/trainersadvice/a-brief-history-of-training-14356560

Maier, F., Meyer, M., & Steinbereithner, M. (2015). Nonprofit organizations becoming businesslike: A systematic review. *Nonprofit and Voluntary Sector Quarterly, 45*(1), 64-86. doi:10.1177%2F0899764014561796

Mailepors, K. (2009). *The dilemma of training & development in times of economic recession.* Manchester, NH: Catholic Medical Center.

Majumdar, A. (2017). Developing e-learning to overcome classroom training challenges. *HR Magazine On-Line.* Retrieved from https://www.hr.com/en/magazines/training_development_excellence_essentials/september_2017_training_development/developing-elearning-to-overcome-classroom-trainin_j78vazca.html?s=KYCzdK47uJTY79Iu

Manafi, I., & Marinescu, D. (2013). *The influence of investment in education on inclusive growth – Empirical evidence from Romania vs. EU*. Presented at the 3rd World Conference

Proceedings on Learning, Teaching, and Educational Leadership. Retrieved from https://core.ac.uk/download/pdf/82186234.pdf

Manimaran, S. (2010). Linkage between service quality and customer loyalty in commercial banks. *Journal of Marketing and Communication*, *6*(1), 26-34.

Mark, J. J. (2012, December 20). Lao-Tzu. *Ancient History Encyclopedia.* Retrieved from http://www.ancient.eu/Lao-Tzu/

Marquart, M., & Rizzi, Z. (2009). Case study of BELL E-learning: Award-winning, interactive e-learning on a nonprofit budget. *International Journal of Advanced Corporate Learning*, *2*(4), 50-56. Retrieved from https://www.learntechlib.org/p/45707/

Mars Polar Lander Team. (1999). *Mars climate orbiter team finds likely cause of loss.* Washington, DC: National Aeronautics and Space Administration. NASA news release 1999.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396. doi:10.1037/h0054346

Mathai, R. (2017). Evaluation and effectiveness of elearning in the corporate training process with special reference to four and five star hotels in Tamil Nadu-India. *I-managers Journal on Management*, *11*(4), 53-60. doi:10.26634/jt.11.4.13451

May, C. (2006). A rational model for assessing and evaluating complex interventions in health care. *BMC Health Services Research, 6*(86), 1-11. doi: 10.1186/1472-6963-6-86

May, C., & Finch, T. (2009). Implementing, embedding, and integrating practices: An outline of the normalization process theory. *Sociology, 43*(3), 535-554. doi:10.1177/0038038509103208

May, C., Harrison, R., Finch, T., MacFarlane, A., Mair, F., & Wallace, P. (2003) Understanding the normalization of telemedicine services through qualitative evaluation. *Journal of Infometrics in Health and Biomedicine, 10*(6), 596-604. Retrieved from https://academic.oup.com/jamia/article/10/6/596/762001

May, C. R., Mair, F., Finch, T., MacFarlane, A., Dowrick, C., Treweek, S., Montori, V. M. (2009). Development of a theory of implementation and integration: Normalization process theory. *Implementation Science*, *4*(29), 1-9. doi:10.1186/1748-5908-4-29

McCarney, R., Warner, J., Iliffe, S., Haslen, R. V., Griffin, M., & Fisher, P. (2007). The Hawthorne effect: A randomized, controlled trial. *BMC Medical Research Methodology*, *7*(30), 1-8. doi:10.1186/1471-2288-7-30

McGregor, D. (1960). *The human side of enterprise.* New York, New York: McGraw Hill.

McIntyre, S. G., Gauvin, M., & Waruszynski, B. (2003). Knowledge management in the military context. *Canadian Military Journal, 4*(1), 35-40. Retrieved from http://cradpdf.drdc-rddc.gc.ca/PDFS/unc35/p523562.pdf

McLeod, S. (2016). Maslow's hierarchy of needs. *Simply Psychology Online.* Retrieved from http://www.simplypsychology.org/simplypsychology.org-Maslows%20Hierarchy%20of%20Needs.pdf

McNamara, C. (2016, December 3). Free nonprofit micro-eMBA module #3: Role of the nonprofit chief executive officer. *Free Management Library.* Retrieved from http://managementhelp.org/freenonprofittraining/role-of-ceo.htm

McNeil, J. D. (1969). Forces influencing curriculum. *Review of Educational Research, 39*(3), 293-318. doi:10.2307/1169468

Moffat, M. (2016). *Outline of the U.S. Economy.* Washington, DC: Department of State.

Molina, J. A., & Ortega, R. (2003). Effects of employee training on the performance of North-American firms. *Applied Economics Letters, 10*(9), 549-552. doi:10.1080/1350485032000100297

Moran, A. M., Coyle, J., Pope, R., Boxall, D., Nancarrow, S. A., & Young, J. (2014). Supervision, support and mentoring interventions for health practitioners in rural and remote contexts: An integrative review and thematic synthesis of the literature to identify mechanisms for successful outcomes. *Human Resources for Health, 12*(10), 1-30. doi:10.1186/1478-4491-12-10

Morreale, J. C. (2011). *The impact of the great recession on the financial resources of nonprofit organizations.* New York, NY: Pace University, Wilson Center for Social Entrepreneurship.

National Aeronautics and Space Administration. (1986). *Report of the presidential commission on the space shuttle Challenger accident.* Washington DC. Retrieved from https://spaceflight.nasa.gov/outreach/SignificantIncidents/assets/rogers_commission_report.pdf

National Center for Charitable Statistics. (2013). *Frequently asked questions.* Washington DC: Urban Institute. Retrieved from Urban.org/FAQ

National World War II Museum. (n.d.). Explore WWII History. Retrieved from http://www.nationalww2museum.org/learn/education/for-students/ww2-history/ww2-by-the-numbers/wartime-production.html

Nelson, H. J. (1998). *On process theory.* Boulder, CO: University of Colorado.

Nixon-Ponder, S. (1995). *Eduard C. Lindeman: Leaders in the field of adult education.* Kent, MA: Ohio Literacy Resource Center. Retrieved from https://eric.ed.gov/?id=ED380667

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation.* New York, NY: Oxford Press.

Nonprofit HR Solutions. (2013). *Nonprofit employment trends survey.* Washington, DC. Retrieved from http://www.nonprofithr.com/wp-content/uploads/2013/03/2013-Employment-Trends-Survey-Report.pdf

Northern Illinois University. (2015, March 11). *Howard Gardner's theory of multiple intelligences.* Retrieved from https://www.niu.edu/facdev/_pdf/guide/learning/howard_gardner_theory_multiple_intelligences.pdf

O'Connor, P., Reddin, C., O'Sullivan, M., O'Duffy, F., & Keogh, I. (2013). Surgical checklists: The human factor. *Patient Safety in Surgery, 7*(14). doi:10.1186/1754-9493-7-14

Onaka, F. (2013). Aspects of process theories and process oriented methodologies in historical and comparative sociology: An introduction. *Historical Social Research, 38*(2), 161-171. doi:10.12759/hsr.38.2013.2.161-171

Osibanjo, O. A., Abioudun, J. A., & Kehinde, J. O. (2010). Human resource management and employee job satisfaction: Evidence from the Nigerian banking industry. *Review of Economic Studies & Research, 5*(1), 109-124. Retrieved from https://www.uav.ro/jour/index.php/jebr/article/view/339/pdf_104

Otis-Green, S., Yang, E., & Lynne, L. (2013). ACE project advocating for clinical excellence: Creating change in the delivery of palliative care. *Omega: Journal of Death & Dying, 67*(0), 5-19. doi:10.2190/OM.67.1-2.b

Pangiotakopoulos, A. (2011). Workplace learning and its organizational benefits for small enterprises. *The Learning Organization, 18*(5), 364-374. doi:10.1108/09696471111151701

Panesar, S. S., Noble, D. J., Mirza, S. B., Patel, B., Mann, B., Emerton, M., . . . Bandari, M. (2011). Can the surgical checklist reduce the instance of wrong site surgery in orthopaedics? Supporting evidence from an analysis of a national patient reporting system. *Journal of Orthopaedic Research and Surgery, 6*(18), 1-7. doi:10.1186/1749-799X-6-18

Parkay, F. W., & Hass, G. (2000). *Curriculum planning: A contemporary approach.* New York, NY: Allyn & Bacon.

Patel, L., Schmid, A., & Hochfield, T. (2012). Transforming social work services in South Africa: Perspectives of NPO managers. *Administration in Social Work*, *36*(2), 212-230. doi:10.1080/03643107.2011.567321

Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior*, *35*(3), 434-446. doi:10.1002/job.1907

Paxton, J. (2008). Myth vs. reality: The questions of mass production in WWII. *Economics and Business Journal, 92*(1), 91-104. Retrieved from http://www.nebeconandbus.org/journal/v1n1p91.pdf

Peine, A., Kabino, K., & Spreckelsen, C. (2016). Self-directed learning can outperform direct instruction in the course of a modern German medical curriculum: Results of a mixed-method trial. *BMC Medical Education*, *16*(158), 1-11. doi:10.1186/s12909-016-0679-0

Peluso, A. (2017). Practice what we preach: supervisory practice for youth worker professional development. *Journal of Youth Development*, *12*(1), 18-29. doi:10.5195/jyd.2017.481

Peters, J. T. (2014). *Pivot points: Five decisions every leader must make.* New York, NY: Wiley.

Peters, T. J., & Waterman, R. H. (1982). *In search of excellence: Lessons from America's best companies.* New York, NY: Harper and Rowe.

Prince, J. D. (1904). Review: The code of Hammurabi. *The American Journal of Theology*, *8*(3), 601-609. Retrieved from http://www.jstor.org/stable/3153895

Purdue University. (2011). *Well written job descriptions are worth the effort*. Retrieved from http://www.purdue.edu/hr/LeadingEdition/LEdi_404_job_descriptions.html

Quinn, J. B., Anderson, P., & Finklestein, S. (1996). Managing professional intellect: Making the most of the best. *Harvard Business Review*, *74*(2), 71-80. Retrieved from https://hbr.org/1996/03/making-the-most-of-the-best

Raymond, M. A., Mittelstaedt, J. D., & Hopkins, C. D. (2003). When is a hierarchy not a hierarchy? *Journal of Marketing Theory and Practice*, *11*(4), 2-25. doi:10.1080/10696679.2003.11658505

Research Ethics Guidebook. (2016). *Permissions and approval*. Retrieved from http://www.ethicsguidebook.ac.uk/Permission-and-approval-10

Rogers, C. (1994). *Freedom to learn* (3rd ed.). New York, NY: Pearson.

Rosen, M. A., & Pronovost, P. J. (2014). Advancing the use of checklists for evaluating performance in health care. *Academic Medicine, 89*(7), 963-965. doi:10.1097/ACM.0000000000000285

Roszell, S. (2009). Research in quality improvement: A safety checklist creates an uproar. *Journal of Nursing Law, 13*(1), 19-24. doi:10.1891/1073-7472.13.1.19

Rowe, T. (2012). A climate of safety. *Journal of Obstetric and Gynaecology Canada, 34*(4), 313-314. Retrieved from https://www.jogc.com/article/S1701-2163(16)35206-9/pdf

Sadler-Smith, E. (2006). *Learning and development for managers.* Oxford, England: Blackwell Publishing.

Salcido, R. (2013). Lifelong learning. *Wound Care Journal, 26*(10), 440. doi:10.1097/01.ASW.0000434952.89478.e0

Santos, R. (2012). *Andragogy content knowledge technology: A training model for teaching adults*. Phoenix, AZ: Arizona State University.

Sawada, K. (2012). *A model of adding relation between two levels of a linking pin organization structure.* London, England: World Congress of Engineering.

SEER Analytics. (n.d.). Data Science. *SEER Analytics.* Retrieved from http://www.seeranalytics.com/new-page/

Senge, P. M. (1999). *The dance of change.* New York, NY: Crown.

Senge, P. M. (2015). *Fifth Discipline.* New York, NY: Doubleday.

Shin, H. W., Picken, S., & Dess, G. (2017) Revisiting the learning organization: How to create it. *Organizational Dynamics, 46*(1), 46-56. doi:10.1016/j.orgdyn.2016.10.009

Sirkin, H. L., Keenan, P., & Jackson, A. (2005). The hard side of change management. *Harvard Business Review, 83*(10), 108-118. Retrieved from https://hbr.org/2005/10/the-hard-side-of-change-management

Sleight, D.A., (1993). *Vestibule training method:* A Developmental History of Training in the United States and Europe. Retrieved from http://www.blackwellreference.com/public/tocnode?id=g9780631233176_chunk_g978140511697825_ss1-4#citation

Smith, D. (2003). Five principles for research ethics. *American Psychological Association - The Monitor, 34*(1), 56. Retrieved from http://www.apa.org/monitor/jan03/principles.aspx

Snell, M. (2017, May 30). The Learning Years of Medieval Childhood. *History Modern*. Retrieved from http://historymedren.about.com/od/medievalchildren/a/child_learn_3.htm

Stanford University. (2013). *What is scholasticism?* Retrieved from http://bartholomew.stanford.edu/scholasticism.html

Statista. (2017). McDonald's - Statistics & facts. *Statista.* Retrieved from https://www.statista.com/topics/1444/mcdonalds/

Stewart, M. (2010). Theories of X and Y revisited. *Oxford Leadership Journal*, *1*(3), 1-5. Retrieved from https://studylib.net/doc/8272488/theories-x-and-y--revisited

Stotz, S., Sun Lee, J., Rong, H., & Murray, D. (2017). The feasibility of an e-learning nutrition education program for low-income individuals. *Health Promotion Practices*, *18*(1), 150-157. doi:10.1177%2F1524839916661717

Strebel, P. (1996). Why do employees resist change? *Harvard Business Review*, *74*, 86-94. Retrieved from https://hbr.org/1996/05/why-do-employees-resist-change

SurveyMonkey. (2017, July 7). *SurveyMonkey Home Page*. Retrieved from https://www.surveymonkey.com/

Tabachnick, B,G., Fidell, L.S. (2013). *Using Multivariate Statistics, 6th Ed.*. New York City, New York, Pearson.

Tahk, S. C. (2014). Crossing the tax code's for-profit/nonprofit border. *Penn State Law Review*, *118*, 489-554. doi:10.2139/ssrn.2317566

Thompson, P., & Smith, C. (2009). Waving, not drowning: Explaining and exploring the resilience of labor process theory. *Employee Response Rights Journal*, *21*(3), 253-262. doi:10.1007/s10672-009-9116-4

Toff, N. (2010). Human factors in anaesthesia: Lessons from aviation. *British Journal of Anaesthesia*, *105*(1), 20-25. doi:10.1093/bja/aeq127

Toporek, A. (2013). When customers stick: Customer retention by the numbers. (2013, August 19). *Adam Toporek Blog*. Retrieved from http://customersthatstick.com/blog/customer-loyalty/customer-retention-infographic/

Tough, A., (2003, March 24). *Professor Alan Tough Reflects on Self-Directed Learning*/ *Interviewer: H. Robert Donaghy.* Retrieved from http://allentough.com/learning/donaghy.htm

Training. (n.d.). *Free dictionary*. Retrieved from http://www.thefreedictionary.com/training

Training Today. (2016). Developing a training plan for legal compliance. Retrieved from http://trainingtoday.blr.com/article/developing-a-training-plan-for-legal-compliance/

Travelers Insurance. (2016). *Staff training modules*. Lafayette, Colorado, USA: Travelers Insurance.

Trembly, A. (2013, January). Can a preflight checklist make hospital discharge safer? *Nursing Management, 44*(1), 8-11. doi:10.1097/01.NUMA.0000424024.13787.4b

Trochim, W. M. K. (2006, October 20). *Design.* Social Research Methods. Retrieved from http://www.socialresearchmethods.net/kb/design.php

Tullis, J. G., & Benjamin, A. S. (2011). On the effectiveness of self-paced learning. *Journal of Memory and Language, 64*(2), 109-118. doi:10.1016/j.jml.2010.11.002

U.S. Department of Commerce. (2016). *Educational Attainment in the United States: 2015. U.S. Census.* Retrieved from https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development (2009). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies,* Washington, D.C. Retrieved from http://files.eric.ed.gov/fulltext/ED505824.pdf

U.S. Department of Health and Human Services. (2016). *Module 2: Research design*. Office of Research Integrity. Retrieved from https://ori.hhs.gov/content/module-2-research-design

U.S. Department of Military Benefits. (2019). *GI Bill Overview.* Military.com Benefits. Retrieved from https://www.military.com/education/gi-bill/learn-to-use-your-gi-bill.html

U.S. Senate. (2015). *Special committee to investigate the national defense program*. Retrieved from https://www.senate.gov/artandhistory/history/common/investigations/Truman.htm

University of Florida. (2015). Gagne's 9 events of instruction. *Center for Instructional Technology and Training.* Retrieved from http://citt.ufl.edu/tools/gagnes-9-events-of-instruction/

University of North Carolina. (2017). Vulnerable populations. *Institutional Review Board*. Retrieved from https://irb.unca.edu/vulnerable-populations

University of Wichita. (2015). The rise and fall of the use of the Keller Plan. Retrieved from http://webs.wichita.edu/depttools/depttoolsmemberfiles/belder/Question%202%20-%20Keller%20Plan.htm

Updegrove, J. L., & Jafer, S. (2017). Optimization of air traffic control training at the federal aviation administration academy. *Aerospace*, *4*(4). doi:10.3390/aerospace4040050

Uzgalis, William (2019), John Locke, *The Stanford Encyclopedia of Philosophy* (Spring 2019 Edition), Edward N. Zalta (ed.), Retrieved from https://plato.stanford.edu/archives/spr2019/entries/locke/.

van Niekerk, A., Govender, R., Jacobs, R., & van As, A. B. (2017). School bus driver performance can be improved with driver training, safety incentivization and vehicle roadworthy modifications. *The South African Medical Journal*, *107*(3), 188-191. doi:10.7196/SAMJ.2017.v107i3.12363

van Velzen, D. (2017). Opening prison doors. *Stanford Social Innovation Review*, Spring, 57-59. Retrieved from https://ssir.org/articles/entry/opening_prison_doors

Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2017). *Survey Research.* Stanford Department of Education. Retrieved from http://web.stanford.edu/dept/communication/faculty/krosnick/Survey_Research.pdf

Waehle, H., Haugen, A., Softeland, E., & Hjalmhult, E., (2012). Adjusting team involvement: A grounded theory of challenges in utilizing a surgical safety checklist as experienced by nursed in the operating room. *BMC Nursing.* Retrieved from doi:10.1186/1472-6955-11-16

Watson, E. (1999). *John B. Watson.* Muskingum University. Retrieved from http://www.muskingum.edu/~psych/psycweb/history/watson.htm

Weiser, T. G., Haynes, A. B., Lashoher, A., Dezieken, G., Boorman, D., Berry, W., & Gawande, A. A. (2010). Perspectives in quality: developing a WHO surgical safety checklist. *International Journal for Quality in Health Care*, *22*(5), 365-370. doi:10.1093/intqhc/mzq039

White, S. (2008). Siemens A&D customer support increases customer satisfaction through effective training and coaching. *Industrial and Commercial Training*, *40*(1), 29-33. doi:10.1108/00197850810841611

Wolcott, J. J., Fierella, L., & Malone, N. (2013). Instructional strategies for military training systems. *Computers in Human Behavior*, *29*(4), 1271-1888. doi:10.1016/j.chb.2013.01.038

Wolf, L., Nartker, A., McGee, A., Scott, E., & Downer, A. (2017). No internet? No problem! Creative approaches to cost-effective e-learning delivery in resource-constrained settings. *Lancet*, *5*(8). doi:10.1016/S2214-109X(17)30115-8

Yoshimoto, K., Inenaga, Y., & Yamada, H. (2007). Pedagogy and andragogy in higher education: A comparison between Germany, the UK, and Japan. *European Journal of Education*, *42*(1), 75-97. doi:10.1111/j.1465-3435.2007.00289.x

Yun, M. H., Han, S. H., Hong, S. W., Kwahk, J., & Lee, Y. H. (2000). Development of a systematic checklist for the human factors evaluation of the operator aiding system in a nuclear power plant. *International Journal of Industrial Ergonomics*, *25*(6), 597-609. doi:10.1016/S0169-8141(99)00046-3

STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

> Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)
>
> Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

> Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name and date Christopher Coker 9/22/18