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Walden University

College of Management and Technology

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Peter Cronrath

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> > Walden University 2020

Abstract

Corporate Trainers' Intent to Adjust Training Programs for Fostering Employee Self-

Efficacy

by

Peter Cronrath

MA, Montclair State University, 2004

BS, Rutgers University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management - Leadership and Organizational Change

Walden University

March 2020

Abstract

To stay current on technology trends, trainers are tasked with providing cost-effective training to meet the needs of the organization. It is not known if to develop employee self-efficacy, organizational trainers should consider making changes to their programs in accordance with (a) generational needs of employees, (b) methodology of training, and (c) position levels of employees in an organization. The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization. A pre-tested validated survey questionnaire was used to collect data from 146 corporate trainers based on nonprobability purposive sampling. Regression analysis results R = .373; $R^2 = .139$; adjusted R = .017, and, p = .322 would indicate low predictors of answers for the participants. Pearson correlational coefficients .204, to moderate .522, indicated organizational trainers are not consistently making changes to programs based on independent variables: methodology of training and the position levels of employees. The more predictive .405 to a high .604 results of organizational training professionals' intent to make changes to meet the generational needs of employees, could be explained through more in-depth literature and analysis of the topic by participants. The results of organizational training professionals' intent to make changes would support more productive training programs, which create higher levels of self-efficacy development in employees while reducing the cost of organizational training in the long-term that may lead to positive social change.

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Dedication

I dedicate my research to my wife and children, for providing the support, love, and reason I put forth the efforts needed to complete my work. Without their constant reminder that life has meaning beyond work and play, my accomplishments are reflected in their lives. All sacrifices made regarding time, attention, and simply where is daddy (in the office typing), were done to enhance the betterment of myself and my family. I do not have enough words to thank them for their patience and efforts.

I also want to acknowledge my mother who passed away during my pursuit of my goal to get my doctorate. She was a motivator when she went back for a master's degree after having a successful career, becoming a model for what a scholar-practitioner really is in today's business environment. I acknowledge my brother who has motivated me to continue my journey to be a better person. His ability to read the newspaper every day, to learn something new, and to continue his fight in the silent black hole every day of his life, is an accomplishment of life, continue to live for more, and to never give up.

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Chapter 1: Introduction to the Study

In today's competitive business environment, new systems and technology are often implemented to achieve the goals of an organization. Employees are then required to complete training to be able to utilize the new systems. The process of designing and developing corporate training programs to address specific technology and the needs of workers potentially involves the use of external professional trainers. But these trainers may have limited resources to assemble programs that address the diverse needs of the employees based on different ages, knowledge, learning styles, and a level of resistance accepting new information.

The following study addresses whether corporate trainers change their training behaviors with the intention of developing self-efficacy of the trainees. If trainers alter the training program design or the training methodology to address specific groups of employees, the potential to alienate or reduce learning could occur. The reduction in the development of employee self-efficacy to accomplish their work, based on the desired skills not learned from the training, could deem the training ineffective.

Thus, I examined training and learning concepts regarding generationally different individuals, various modalities of training, and the significance of position level related to training diversified employees within an organization. Data were gathered from organizational trainers through a survey to determine if they intend or change their training behavior depending on the employees' specific needs. By taking the perspective approach of the trainer, a correlation can be established whether trainers try to develop self-efficacy in the trainees based on generational needs, position level, or the training methodology.

Background of the Study

As companies try to achieve economic benefits, various factors such as strict business models, lack of understanding of customers, and limited resource commitment can lead to little understanding when changes occur (Soroka, Liu, Han, & Haleem, 2017). The workforce has increasingly become diversified, with employees who have different needs and expectations regarding work and company culture (Kaifi, Nafei, Khanfar, & Kaifi, 2012; Schullery, 2013). The lack of understanding has caused a growing need for training programs to address employee differences; to increase the productivity of the organization and collaboration (knowledge sharing) within the business culture (Bhatti & Kaur, 2010; Bourg, Stoltzfus, McMannus, & Fry 2010; Kraiger, 2007).

The concept of the development of self-efficacy, is often referenced in the literature with the focus on the educational environment (Howardson & Behrend, 2015). The key aspects of efficacy development include enactive mastery, vicarious experience, and verbal persuasion, and arousal (Bandura, 1977). Because enactive mastery, learning by doing the job, is considered an important part of developing self-efficacy (Bandura, 1977), further research is needed to determine how employees in the business environment develop efficacy. An issue with developing enactive mastery of content is that the content is continuously changing in a technological business environment creating further lack of understanding and competencies in employees of the business systems, as value creation is traded for cost savings (Visnjic, Jovanovic, Neely, & Engwall, 2017).

There is a gap in knowledge in determining whether organizational trainers can develop self-efficacy when the content, the employees, and the methodology of delivery is continually changing. To further expand this concept, the possibility of employees' developing enactive mastery of business systems is further reduced when training does not align with the current technology or the employees' needs. Potential causes of the problem are the generational needs of employees reducing the development of self-efficacy and self-identity from different training methods of various trainers and systems (Costanza & Finkelstein, 2015; Lines, 2007; Urick, 2014).

Further, when anxiety exists from training or the level of difficulty of the content, self-efficacy is not established in individuals (Bandura, 1988). Individual needs that are not addressed further lead to this anxiety and resistance to learning (Prokopcakova, 2015; Sasikala & Anthonyraj, 2015). Divergence in generational identity has also caused an increasing use of stereotypes to classify why employees are resistant to programs and ineffective in increasing deliverables based on the learning outcomes (Van Volkom, Stapley, & Amaturo, 2014).

Another issue in developing self-efficacy through training is management decisions to form new training programs or outsource the work, which are impacted by the managements' perception of value creation from either human capital improvements or cost savings on outsourced projects (Barbu & Song, 2016). Negative perceptions of training programs increase the negative mentality of employees, reducing the development of self-efficacy of the learning outcomes (Kumar, Bhatia, & Chiang 2013; Macy, 2005).

Additionally, training consultants may hold back information from the training session, so they are employed for a longer duration, which affects human capital and organizational values (Zhao, Qi, & de Pablos, 2014). The issues employees are claiming may be intentional by the trainer or potentially due to a lack of time in providing quality training (Schiffthaler, Kostadima, Delhomme, & Rustici, 2016). Because employees experience issues with training and the workforce is increasingly becoming multigenerational (Singh, 2013), this study addressed the trainer's impact on influencing self-efficacy development in employees.

Problem Statement

Organizational leaders often provide training programs to employees when implementing new technological systems; however, various deficiencies exist in the implementation process limiting the effectiveness of the employees using the system (McAlearney, Robbins, Kowalczyk, Chisolm, & Song, 2012). According to a report by the World Economic Forum, in the year 2020, 29% of the workforce will have to learn new skills quickly due to the increase in new technology implementation causing employee skills instability (www.weflive.com, 2018). To overcome these deficiencies, an increase in self-efficacy beliefs will influence the way an employee anticipates expected outcomes, which directs their thinking processes and result in receptive learning and achievements that further strengthens self-efficacy development from training (Bandura, 1977, 1988).

Because training involves knowledge transfer, evaluation of the impact a trainer has on the organizational programs must also be considered (Liu, 2018). Trainers often use structured design and delivery of content to employees to gain a higher degree of consistency in both process and outcomes (Tracey et al., 2015). Companies accept the structured approach because it lowers the cost through economies of scale when the training is considered effective (Aguinis & Kraiger, 2009; Visnjic, Jovanovic, Neely, & Engwall, 2017). But the general management problem organizations face is the inability to develop employee efficacy with new technology and systems when providing costefficient training programs with the intention of increasing productivity (Bloor, Sampson, & Gekara, 2014; Madsen, Bødker, & Tøth, 2015).

The specific management problem involves whether professional trainers intend to change their programs based on generational needs, employees' position levels, or training methodology with the intention of cultivating self-efficacy in employees. To develop self-efficacy, trainers must create a learning environment that is conducive to behavioral improvements by addressing the needs of individuals (Bandura, 1977). Given the complex matrix of employees in the organizational design, different training programs are needed to accommodate the needs of employees of various ages, learning styles, learning preference, and position levels in the organization (Chaudhuri & Bartlett, 2014; Cruz, Rincon, & Haugan, 2013; Lyons, Urick, Kuron, & Schweitzer, 2015). Because cost-based decisions by management sway the selection and number of appropriate training programs, increased effectiveness in delivering content is preferred (Barbu & Song, 2016; Dobbin, 2013).

Understanding the impact trainers can have on the trainees, increases the potential value that trainers can make by reducing stress and improving knowledge acquisition when providing such programs within an organization (Saks, 1994). Using a quantitative cross-sectional correlational study design, data were gathered through a survey questionnaire of organizational trainers to assess whether changes occur in training sessions based on the needs of those individuals in the training session. The data analysis involved current industry practices, which led to suggestions on how to achieve improvements in the organizational training industry.

Purpose of the Study

The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization. If transfer training occurs between the trainer and the trainee, the efficacy of the content is obtained to a significant level that the knowledge can be applied to the workplace (McCracken, Brown, & O'Kane, 2012). Because retention of information over time decreases, the need exists for trainers to spend time teaching trainees how to utilize the information in the future, thereby retention of the content increases effectiveness (Awais Bhatti, Ali, Mohamed Isa, & Mohamed Battour, 2014). These concepts can be applied industry wide to improve how organizational trainers approach employee training.

Because the cost of training programs is a significant concern for management, selecting the most effective programs can reduce the costs associated with training, retraining, knowledge retention, and corporate knowledge management (Elliott, Dawson, & Edwards, 2009). Analyzing whether trainers are addressing these issues, can provide an understanding on how trainers can then adjust their training programs to reflect best practices, increasing the effectiveness of the training programs for the generationally different employees (Kulviwat, Bruner, & Neelankavil, 2014).

Research Questions and Hypotheses

Although literature has shown relationships between self-efficacy and various variables such as age (Bausch, Michel, & Sonntag, 2014), no research studies have been observed to include the three independent variables suggested in this study. These independent variables include generational needs of employees, methodology of training, and position levels of employees within the organization. Changes in training programs to address these independent variables can impact the development of self-efficacy in employees, the dependent variable (Bandura, 1977).

The following research questions and hypotheses were used to test whether trainers have intent to make changes to their training programs based on various variables. By separating the variables, a greater understanding was provided regarding which variable is impacting the development of self-efficacy from a training session.

Research Question 1: What, if any, is the significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees?

 H_01 : There is no significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

 H_11 : There is significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

Research Question 2: What, if any, is the significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees?

 H_02 : There is no significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

 H_12 : There is significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

Research Question 3: What, if any, is the significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization?

 H_03 : There is no significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization.

 H_1 3: There is significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization.

Theoretical Foundation

The theories used to construct the theoretical frameworks include learning theory, self-efficacy theory, cognitive load theory, process theory, and generational identity theory (Kraiger, 2007; Macy, 2005; Paas, van Gog, & Sweller, 2010). Socio-cognitive or self-efficacy theory explains how mastery of knowledge affects achievement and setting a future goal or taking on additional challenges. Employees believing in their ability to complete a task influences their outcome expectations, impacting their performance (Jia, Bhatti, & Nahavandi, 2014).

Socio-cognitive theory also relates to knowledge transfer between individuals and groups, an essential part of training theory (Ringberg, & Reihlen, 2008). For instance, knowledge transfer is integral senior executives developing future leaders without impacting the operations during the transition (Starks, 2013).

Memory (short- and long-term and forgetting) and selective filtering (information processing and cognitive development) were also important to the theoretical foundation. Individuals tend to accept and remember relevant content (Gunseli, Olivers, & Meeter, 2016). Thus, training content must be considered suitable, so participants do not discard information. For example, training sessions that involve mass information may not be remembered long-term (McDaniel, Fadler, & Pashler, 2013). Spaced training can impact long-term memory of content, though short-term forgetting may occur.

Individuals may process the information in the training but then discard it as they move onto the next topic (Dunning & Holmes, 2014). However, with working memory, individuals can still process and retain information in their memory with training extended over time. Additionally, the memory of content can be improved by teaching learning strategy adaptation, so new information is accepted, not resisted (Bottiroli, Cavallini, Dunlosky, Vecchi, & Hertzog, 2013). Providing feedback within the training program also provides higher levels of efficacy and learner motivation (Corbalan, Kester, & van Merriënboer, 2009). By using strategies like these, content can be considered relevant and stay in employee's memory longer.

Another consideration in the theoretical foundation was identity. Individuals' perceptual self-identification of their ability varies based on age and experience in the development of the self-efficacy of learning outcomes designed for various training modalities. Work identity is also different based on the number of years an individual commit to a specific job (Singh, 2013). When changes occur within the workplace and

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training environment, changes also occur in the self-identity of the individual. As individuals have more time vested in work establishing such an identity, the harder it is to adapt to changes without having personal identity conflict.

These theories relate to the problems addressed in this study regarding development of self-efficacy that is impacted by trainers. Trainers can train others when they feel like they have had adequate training themselves (Amin, Aziz, Halamek, & Beran, 2013). Thus, self-efficacy applies to trainers as well as trainees, which is important when looking at how to develop training programs to increase self-efficacy. Additionally, with the input of the learner, then customizes the training to be more effective for the trainee (Vitulli, Giles, & Shaw, 2014).

Nature of the Study

A quantitative research methodology was selected for the study to gain a broader scope of the industry of external training professional. Because training programs vary across the industry, business, and globally, the focus of the research was on the trainers, not on these differences or the specific content of the training.

By gaining the perspective of what current organizational trainers are doing in the industry and whether they are adjusting to the trainees, a relationship can be shown to impact the training. If trainers are basing the training sessions on various generational needs, either for leadership or employees, the impact on the development of self-efficacy within the trainees may vary (Deal et al., 2013). Statistical results were collected from

surveys to lead to suggestions for best practices to address the problems associated with the effectiveness of trainers.

Previous research using quantitative research has been used to explain the training and development of these variables separately: generational differences, self-efficacy development, and the implementation of effective training programming (Morrison & Lent, 2014). For example, Galanaki, Bourantas, and Papalexandris (2008) researched the difference between the training content of generic or firm-job-specific training content. However, the study did not account for the preparation time needed to develop such programs, only the effectiveness of the two different types of training content. Using a similar concept of customization of content, comparing the perceived receptiveness, responsiveness, and effectiveness of the training program from the trainer perspective would suggest whether they should adjust the programs (Chaudhuri & Bartlett, 2014; Zhao et al., 2014). Transfer design factors, such as job-related content training, improve performance self efficacy and reaction measures which bridge the gap between content validity and transfer motivation (Bhatti & Kaur, 2010; Wickramasinghe, 2015).

Qualitative research methodology designs were not selected for three distinct reasons. The first is that the collection of data with interviews or observation would not provide the breadth of participants from various organizations experiencing the problem because trainers may only spend limited time at one business. The second issue involves the inability of generalizability of the study if only a small population of trainers is studied (Mason & Ide, 2014). Lastly, validation and replicability would not be sound if changes are constantly occurring in the training profession in addition to the implementation of technology systems in companies.

In selecting the cross-sectional design for this quantitative research study, I was able to describe whether relationships exist between variables at one point in time. Results can be arranged and summarized by categories, using a survey of organizational training professionals allowing for cross-tabulation and linear regression analysis of grouped participants (Kok-Yee, Soon, & Kim-Yin, 2008). Some categories of attributes that can be reported in the survey are generational differences, use of data analytics tools, some training programs, and self-efficacy development (Dabke, 2016). The results may indicate statistical probabilities, to better understand how training programs impact generationally different employees in developing self-efficacy (Buckingham, 2012).

Classical experimentation and quasi-experimental research studies were not selected because of the inability to group the participants previously to exposure to the phenomena. Additionally, pre- and post-tests could not be proctored on every individual who is exposed to the phenomena because the variables cannot be controlled by the researcher. The population of trainers is also globally diversified, having experiences within various organizations that would not provide answers to the hypotheses suggested in this study using other research designs.

As organizational trainers are globally diversified and may travel to different business locations, the collection of data was possible with an Internet-based survey to collect the data. Because most of the trainer's utilize computer systems within their

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profession, the targeted population all had access to the online survey, sent through email with the associated link. Electronic data, entered from a computer by each participant can then be manipulated easier to develop charts, graphs, and conduct the correlation analysis with electronic survey distribution tools. Because the purpose of a correlation study is to demonstrate the relationship between variables, using a Likert-type survey question scale provided a range of values that can be analyzed using regression analysis.

Online surveys tools were also selected due to the minimal cost of using such a survey across a globally diverse population. The ability to create and distribute the survey in less time is also an advantage, while the collection rates are moderate, the ease of follow-up to gain more participants who complete the survey adds to the value of the tools (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). Because of all the disadvantages of snail-mail, conducting in-person interviews or telephone surveys, the decision to use an online survey tool was justifiable and aligned with the research methodology and research questions.

A purposeful sample can be selected from the gathered data specific to organizational trainers. A demographic statistical set of questions were completed to clarify the participants who complete the survey questionnaire using a survey tool to make sure all participants were trainers. The survey questions (Appendices A and B) on the self-designed Trainers Development of Self-Efficacy Survey were aligned with the three main independent variables of generational differences, the methodology of training, and the employees' position level within the organization. The dependent

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variable was the development of self-efficacy in the employees if the independent variables are addressed or if change occurs in the training based on them.

Definitions

The following term definitions are to provide a perspective of the variables, covariables, and the concepts used in the context of this study.

Organizational trainers: Organizational trainers are often brought into an organization as consultants to provide different perspectives and market experience to increase organizational knowledge. The concepts of "outside the box" or "shaking things up" are used to describe how trainers from the outside drive changes that may not be part of the organizational culture. External trainers often stay current with trends in the industry; however, they may not know the specific needs of each employee in the various organizations they work (Cabler, 2018).

Generational differences: As individuals have various learning styles, they also associate with similar events as others, grouping a collective of individuals that all form a generation. Individuals, as part of the collective identity, may have common needs associated with age, education level, and life experiences, etc. Biases related to these generational differences are formed, creating stereotyping of individuals who are associated with the common group. Knowledge, experiences, skills, and emotional intelligence are all factors related to individuals of the same generation, whereas differences between generations are identifiable from comparisons among the different generations on these variables (Hillman, 2014). *Knowledge acquisition*: Coming from the concepts of expert systems, the process of capturing knowledge can be described by established objectives, sets of rules, and framing ontologies. The difficulty of knowledge acquisition is the use of language parsing which might provide a definitive understanding of one language but translated could have a completely different meaning (Dahling, 2016; Saks, 1994).

Knowledge retention: With the concepts of memory and information processing, the retention of knowledge is significant for an individual in the understanding of processes and procedures regarding effectiveness and efficiency of performance over time. Retaining information from training relates to the cost associated with the training program to calculate the return on investment for such training (Laker & Powell, 2011).

Knowledge transfer: As defined in organizational theory, the ability of one or more individuals to share or disseminate knowledge to others within an organization as to manage, create, and solve problems based on the inputs provided (Bates, Holton, & Hatala, 2012).

Self-serving bias: As individuals' will protect their self-interests, they are likely not to put forth an effort that would maximize potential. By limiting performance to conserve resources, the impact of inputs on the production of outputs was less. As related to training sessions, both the instructor and the learner could both negatively impact the quality of the program in knowledge transference and knowledge acquisition (Paas, Tuovinen, van Merriënboer, & Darabi, 2005). *Self-transcendence*: A characteristic trait of personality that relates to spirituality and universal belonging. As related to training and organizational commitment, belonging to something bigger than oneself would be a motivating factor to improve knowledge and skills to contribute to the success of the organization (Matherly, Amin, & Al Nahyan, 2017).

Assumptions

The following assumptions relate to the context of this study and are needed to explain the perspective of the researcher in the design of the research.

First, the pilot study involved 20-25 external organizational trainers who have conducted training sessions over the past year were used as the target population of the study. The assumption was that only those that have experience as a trainer will participate in the survey. I also assumed that individuals who completed the survey would have some level of experience conducting training programs, developing training curriculum, and/or implementing procedural instructions for businesses. Further, I assumed that participants answered the questions truthfully based on their knowledge and experiences. Additionally, it was assumed that trainers provided accurate information based on what they have practiced versus reflections on known best practices in the industry. Reflection of effectiveness is biased by the individual participants and cannot be accounted for if individuals embellish their own practices. Thus, the study does not account for effectiveness, but if practices exist and reflection on those practices occur. Finally, the assumption that trainers making changes to their training programs would indicate that the purpose is to address the needs of the employees.

Scope and Delimitations

As this study was conducted with a population of individuals who conduct training in various organizations, the resulting data on the correlation between variables is generalizable rather than other studies based on a specific company or set of individuals. However, other variables could be explored in future research related to training, generational needs, and self-efficacy. For example, other theories could be used that involve behavior changes, personality, and motivation of employees based on training and development programs.

Aspects of training in the scope of the study were related to trainer perceptions. Technology has increased the requirement that employees learn new skills in a shorter time as to stay current (Riva et al., 2012). Because of the time limit, training is difficult to achieve efficacy without preparing employees with pretraining to engage them in learning (Howardson & Behrend, 2015). However, determinations of the appropriate length, scope, or depth of the training were not the focus of the study. The research questions centered around whether the perceptions of the trainers perceive that the training is appropriate for the audience of trainees. If training is perceived not appropriate for the trainees, then the assumption is that the trainer would make changes to the program. Finally, Vygotsky (1978) developed the sociocultural theory, which includes the development of tools and signs individuals can use to help them learn and remember. These tools were not explored in the study even though methodology of training is discussed. The research was limited to whether trainers change the training methodology as opposed to which is the most effective. Limiting the scope of the study allowed all trainers who use the various methodology types to participate in the survey. Additionally, further research can be built on the current study to explore which tools are more effective, if a trainer determines that changes are needed to improve the training program.

Limitations

The following limitations are inherent in the study, and I made every attempt to minimize the impact of such limitations on the study. The following limitations are not an exhaustive list and are meant to highlight significance in the research. First, the data were collected limited to quantitative information from willing participants utilizing a Likert-type scale in a survey questionnaire. Additionally, participants were all training professionals, meeting the criteria established for sampling the population, but the population of all corporate trainers was not included. The scope of such a study would be too extreme for the researcher to undertake given time constraints and lack of funding necessary to conduct such a large survey.

I also did not differentiate between individuals who have conducted limited training session or multiple sessions and any other differentiating methodology or type of training programs. These various levels of training experience could have a confounding variable affect regarding the research questions. Although the confounding variable could affect the development of self-efficacy, the research focus is on whether trainers are accounting for self-efficacy development, not that it occurred. Additionally, as the research was focused on three independent variables, other variables may contribute to how trainers conduct their programs. Further research is recommended in the future on different variables and different combinations of variables that could contribute to the knowledge on organizational trainers. Further, because a correlation design methodology was used for the study, cause and effect analysis were precluded. But the design was necessary to answer the research questions and make connections between the variables.

Finally, the survey was available to participants for 2 weeks, limiting the amount of time they have access to complete the survey. This could have caused participants to rush to complete the answers instead of considering their actual practices. The survey also included Likert-type only responses, limiting responses options were available and may not include the full scope of every participants potential feelings or perception of the question. Additionally, because most trainers have access to current literature and a knowledge base of best practices in the industry, answers may be limited to perceptions of what should be done instead of what truly happens. The request that participants provide truthful and accurate reflections of their practices were made; however, the potential for limited responses that are truthful could occur, as participants would not
want to answer questions that could be reflective of poor performance, or the perception of it.

Significance of the Study

Many studies have been conducted related to the training and the development of self-efficacy in individuals, including how learning transfer system inventory occurs (Bates, Holton, & Hatala, 2012). But further research is needed to investigate the extent to which the changes in the perceptions of trainers are related to objective changes of the social context (Consiglio, Borgogni, Di Tecco, & Schaufeli, 2016). The role of self-efficacy as a predictor of work performance suggests that the formation of training programs should center on the main sources of self-efficacy development (Consiglio et al., 2016). Further analysis can be done to examine the learning and training development processes regarding course analysis, design, development, implementation, and assessment of training (Lin, Hunug, & Lee, 2015). To expand on these recommendations from the literature, I conducted this study on the relationship between trainer's development or changes in their training programs with the objective of achieving self-efficacy in different training populations.

Because trainers intend to transfer knowledge through a training program, determining if trainers are focusing on the development of self-efficacy among various trainees would have significance to future training programs. The effectiveness of the trainer can then be improved if an understanding can be established related to whether trainers are currently making changes to the programs, which could impact trainees' learning as it relates to their ability to achieve organizational goals.

The material designed for training programs must be understandable by all, to address the specific needs of employees within the organization, so trainers are not duplicating efforts (Schiffthaler, Kostadima, Delhomme, & Rustici, 2016). Because the technological system is new and complicated for the employees, the trainer needs time to accurately produce effective content that can be delivered in a subsequently timely manner (Kumar, Bhatia, & Chiang, 2013). Trainers then must determine if the development of learning strategies improves the effectiveness of knowledge sharing and organizational retention of information specifically customized to the needs of each company (Schiffthaler, Kostadima, Delhomme, & Rustici, 2016). For a trainer to provide such training, additional time and preparation may be needed to customize the training to the needs of the specific company, reflecting new industry standards based on the data collected.

Employees who gain quality business knowledge, communication skills, and effective people skills from training have a greater capacity to impact the value of the company over those employees that only have technical competencies (Yeh, 2000). Thus, training is needed to develop skills based on the willingness of participants to make changes to improve (Williams, Kessler, & Williams, 2015). Self-evaluation and reflection can be used to assess where individuals need additional training, based on the perceptions of employees and the trainers providing the training (Bishop, Caston, &

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King, 2014). The perception of the training professionals about their ability to impact employees' and the willingness to continually improve even if they believe that they are effective business trainers, reflects a new attitude to adding value to the organization and increasing employee satisfaction with training programs (Wickramasinghe, 2015).

Significance to Theory

Social cognitive theory and training transfer both involve a trainer and the trainee, with the passing of knowledge from one to the other (Bandura, 1977, 1991). Often, the focus is on the trainees, who are influenced by the trainer, the environment, and the learned behavior from a training program in the pursuit of developing self-efficacy of the content to achieve organizational goals. The dependent variable of self-efficacy was used to further explore the boundaries and impact of the social cognitive theory.

Additional theories, such as generational identity and generational difference theories (Mannheim, 1923), were used to support the independent variable of generational needs. Information processing (Piaget, 1936) and cognitive load theory (Sweller, 1988) were used to support the independent variable of training methodology. Memory (McDaniel, Fadler, & Pashler, 2013), learning style (Craik & Lockhart, 1972), and content type delivered (Laker & Powell, 2011) are all concepts that further contribute to training theory. Further, operant behavior theory (Skinner, 1945) is reflected in the training process, as the trainer influences the training environment, personal needs, and behavioral changes that are all required in the development of self-efficacy. Goal setting theory completes the theoretical framework, representing how self-efficacy is the employees' ability to achieve goals that they set in an organization (Knowles, 1980).

The combination of these theories contributes to the framework of the study and the formation of the research questions and hypotheses. Thus, these results of the study further contribute to the knowledge base of these theories, because different variables were utilized in the formation of the survey questionnaire. The resulting data contributes to suggestions on how to improve industry practices as well as paving the way for future research on organizational trainers and the development of self-efficacy of the workforce.

Significance to Practice

As technology advances, the efficiency of workers' production also increases according to the Bureau of Labor statistics report in 2016 (www.bls.org). Maximizing output, based on the input, reflects the needed assessment to determine how to avoid diminishing marginal returns on employee performance (Lambert, 2016). If significant capital is invested in employee development programs, achieving a maximal level of learning at a marginal cost will encourage further investment in the company's human assets. The return on the investment and the increased productivity from the training indicates that training is a valuable investment instead of wasted resources.

Within this study, the focus was on organizational trainers, which provided an alternative perspective on the training industry. When training various employees, different variables can impact the trainer's decision to make considerations for the trainees in a session or within the business environment. The considerations of

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generational differences, training methodology, and organizational level when developing efficacy in the employees can provide insight into new approaches trainers can take when developing or altering new and established corporate training programs.

Significance to Social Change

Positive social change can result from demonstrating a relationship between a trainer's plan to adapt or adjust the program to meet the needs of various employees in an organization. When employees develop self-efficacy in their work, the knowledge gained can be utilized to achieve organizational goals to improve performance. With a greater understanding of how trainers perceive their ability to develop knowledge, through the transfer of knowledge, organizations can develop employees who have greater self-efficacy to attain organizational goals and personal fulfillment. By doing so, training costs can be significantly reduced because additional training, retraining, and additional support services can be minimized as employees will have gained the knowledge and be able to apply it to their work.

Summary and Transition

This study includes the perspective of organizational trainers who develop and deliver knowledge content to employees in the business environment. The variables that included the different generational needs of employees, the methodology or methodology used by the trainer to deliver the content, and the significance of the employees' positions in which trainers would implement change to the programs. These variables were correlated with the dependent variable, the focus of trainers on the development of selfefficacy from the content received from the training program.

The research problem and hypotheses described and defined in this chapter were the basis to examine the relationships between the trainers and their ability to develop self-efficacy among employees for this study. Because these definitions are based on theoretical frameworks, I provide an overview of the literature in Chapter 2 as it relates to training topics. Additionally, Chapter 3 has a description of the research methodology and protocols utilized to collect the data from participants. The results of the survey questionnaire are reported in Chapter 4 with the corresponding statistical tests and data analysis. Chapter 5 includes a discussion on the results of the study regarding recommendations to trainers and the industry to improve future training programs.

Chapter 2: Literature Review

Introduction

The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization. Developing effective programs can reduce the costs associated with training, retraining, knowledge retention, and corporate knowledge management (Elliott et al., 2009). Thus, analyzing whether trainers are addressing these issues can enhance understanding on how trainers can increase the effectiveness of training programs for generationally different employees (Kulviwat et al., 2014).

The following sections of the literature review include search strategies, theoretical foundations, and the main literature review section. The main section is broken down into three sub-groupings related to the variables that affect the development of self-efficacy: personal, behavioral, and environmental (see Figure 1). A summary of the literature concludes the chapter and introduces the methodology sections in Chapter 3.



Figure 1. Factors influencing the development of self-efficacy. Expanding on Bandura, (1991).

Literature Search Strategy

The literature review consists of journal articles over the past 50 years to provide the background for the topics discussed in this research. The following search engines and keywords were used to compile the data needed to support the study. Walden University library system and Rutgers University library system provided the following search engines for this research: ABI/INFORM collection, academic search complete, business market research collection, business source complete, emerald insights, dissertations & theses @ Walden University, National Bureau of Economic Research, ProQuest Central, ProQuest Dissertations & Theses Global, Sage Journals, Sage Research Methods Online, Science Direct, Thoreau Multi-Database Search, and Ulrich's Periodicals Directory.

Utilizing the listed search engines, the following keywords were utilized to produce research articles: *age classifications, cognitive development, cognitive load, conditioning, efficacy, employee integration, employee resistance, expertise, generations, generational differences, generational needs, knowledge acquisition, knowledge sharing, learning, learning styles, operant behavior, self-efficacy, training,* and *training methodology* as well as, theories from *Albert Bandura, Karl Mannheim, Jean Piaget, B.F. Skinner,* and *John Sweller.*

Theoretical Foundation

As companies continue to work for competitive advantages, new ways to optimize competencies are needed (Prahalad & Hamel, 1990). Three main variables influence performance: goal commitment, self-efficacy, and culture as derived from goal setting theory (Knowles, 1980). The theoretical foundation for this study shows the need to identify next-generation competencies with management deciding how much to invest in the advancement and support of such organizational goals. The combination of theories used to construct the theoretical framework include learning theory, self-efficacy theory, cognitive load theory, process theory, and generational identity theory (Kraiger, 2007; Macy, 2005). Additionally, goal setting theory helped provide focus on three main variables that influence performance: goal commitment, self-efficacy, and culture (Knowles, 1980). The theoretical literature review is organized by the need for training with the development of cognitive learning, learning and memory theories, and psychomotor skills with the attitudes that are then reflected from such development.

Training theories derived from the work of several seminal authors who contributed to concepts of training and development used today. For instance, Jean Piaget (1936) developed information processing, theory which explained the cognitive development of children as creating a mental model of the world surrounding them. The theory connected the maturation of the individual with the environmental experiences in the development of different levels of cognitive ability. Further, Karl Mannheim (1923) explained how groups of individuals of similar ages, whose members have experienced a noteworthy historical event within a set period, form a cohort that can be categorized into generations. These groups of individuals with different levels of cognitive ability and experiences reflect an organizational structure of diverse employees.

Following the concept of generational divides, similar conditioning based on the surrounding environment reflects specific learned behaviors. Skinner (1945) developed the operant behavior theory in which stimuli increase behavior, modifying the person's tendency to repeat the behavior in the future. Training is one tool that uses repetitive

stimuli to invoke learning and knowledge acquisition of the participants. The mental processing of information, however, can also be influenced by other outside variables that impede or tax the memory, potentially having a negative effect on learning. Similarly, employees may not express their true needs in the business environment so they do not appear deficient which could cost them their job. Thus, training may not appropriately address these hidden needs of the employees (Dahling, 2016).

As part of the framework for this study, Sweller's (1988) cognitive load theory explains the strain on the working memory to process information. Sweller (1994) suggested that training involves a certain level of mental preparation and ability, mental effort, and working and long-term memory. Instructional design is needed to reduce the cognitive load in learners to make training more effective (Paas, van Gog, & Sweller, 2010).

A final theory that will help explain the theoretical foundation is the cognitive load theory which represents the cognitive load a task imposes on an individual. The seminal author is John Sweller (1994) who suggested that training involves a certain level of mental preparation and ability, mental effort, and the working & long-term memory, thus accounting for several variables that make up cognitive load theory. Since the purpose of instructional design is to maximize knowledge transfer to an individual, establishing and understanding the cognitive load that a training session will have on different individuals is necessary (Paas, van Gog, & Sweller, 2010). Motivation can determine the success of training because the trainees must be willing to maximize the cognitive load for the training for it to be effective (Paas et al., 2005).

These issues must be understood to ensure that attention is given to work, training, and knowledge management (Zuckerman, 1979). Three types of cognitive load exist: intrinsic (effort associated with a specific topic), extraneous (the way information or tasks are presented to a learner), and germane (permanent store of knowledge). The research questions for this study were focused on the extraneous and relevant aspects of the cognitive load because the trainer can create an instructional design to present to the learner. The continuation of the learning process is determined by how the learner stores knowledge, which impacts the development of efficacy of the content. Self-efficacy is an individual's belief in his or her ability to accomplish the desired goal. The belief is developed from building self-confidence, trial and error, modeling, and acknowledgment from others (Bandura, 1977). Further, personal, behavioral, and environmental factors influence the development of self-efficacy.

Bandura's (1991) social cognitive theory also informed the framework, as it relates to self-efficacy through explaining how an individual's mastery of experiences implies a self-enhancing model of achievement and setting a future goal or taking on additional challenges (work). Employees' reflection on whether they can complete a task influences their outcome expectations, impacts performance (Jia, Bhatti, & Nahavandi, 2014). The socio-cognitive theory involving knowledge transfer between individuals and groups is also an important part of training theory (Ringberg, & Reihlen, 2008). The concept of knowledge transfer is integral to the succession planning of an organization as senior executives need to develop future leaders without impacting the operations during the transition (Starks, 2013). Knowledge management and organizational memory have also been linked to leaderships ability to make decisions within an organization, improve employee turnover, increase organizational learning, and develop innovative products and services (Fiedler & Welpe, 2010).

Two theoretical concepts that add to the study involve memory (short- and longterm and forgetting) and selective filtering, which involves information processing and cognitive development. Individuals tend to select only relevant information to remember (Gunseli, Olivers, & Meeter, 2016), so it is important to make training content relevant. Training sessions that involve massed (grouping) information allows for quicker processing, however, the long-term effect of memory retention do not last (McDaniel, Fadler, & Pashler, 2013). Spaced training has a greater lasting effect on memory of content but grouping of content is not as strong and short-term forgetting may occur.

Similarly, individuals can use their working memory to process information during the training sessions, and subsequent test, but may discard the information as they move onto the next topic (Dunning & Holmes, 2014). Regardless, working memory suggests that interval or spaced training makes individuals process and retain information in their memory. as the training would extend over time. Additionally, a method of improving the memory of content is by teaching learning strategy adaptation as part of the training sessions, so new information is accepted (Bottiroli, Cavallini, Dunlosky, Vecchi, & Hertzog, 2013). Providing feedback to trainees on the correct answers within the training program also provides higher levels of efficacy as well as higher learner motivation (Corbalan, Kester, & van Merriënboer, 2009). Strategies like this can be sed to help content be considered relevant, active in the memory, and related to previously learned content so it can be grouped in the memory for a longer time.

In addition to memory, other variables impact performance, including how selfefficacy, metacognition, and learning processing and how they function together. Regarding processing of information, the deeper the processing, the more information is remembered and for a longer period as opposed to surface processing, which is limited (Craik & Lockhart, 1972; Craik & Tulving, 1975). Elaborate processing or critical thinking are two ways that deep processing occurs for an individual making self-efficacy the strongest predictor of performance (Coutinho & Neuman, 2008). Establishing a learning plan and then communicating that to the trainee will increase the ability to have greater depth of learning because they will not be disorganized. If the organization is significant to the effectiveness of training, additional time may or may not be required to improve the training process.

Information quality and system quality must also be considered, as they both positively affect the learners' satisfaction level from the training (Eom, 2012). However, the role of the instructor is more important than that of the learning management tools in

creating useful content for gaining necessary knowledge. The learning materials presented must include the development of self-efficacy to achieve a greater satisfaction level for the individual learner. When personalized presentations are utilized, better learning achievement results than not having personalized presentations (Yang, Hwang, & Yang, 2013).

These theories relate to the specific problems that are addressed in this study since trainers need to understand how they are impacting the development of self-efficacy through learning outcomes and using uniquely different methodology. Trainers must feel that they have achieved a level of effective training to be able to then train others (Amin, Aziz, Halamek, & Beran, 2013). Trainers can use learning trajectories that plot the path from learner to expertise, accelerating the transition which could be limited by the implicit learning process that occurs due to environmental influencers (Patterson, Pierce, Bell, & Klein, 2010). Additionally, knowledge mapping of the training curriculum creates a sequential learning path, utilizing the input of the learner, then customizes the training to be more effective for the trainee (Vitulli, Giles, & Shaw, 2014). Comparing self-efficacy and self-serving bias could provide new information within the realm of training as the trainer is only as good as the belief that they are effective (Bui, 2017).

Though these theories were useful in the framework, there are some limitations to the theories regarding the development of self-efficacy because the required amount of time devoted to training, learning style differences, and individuals' capabilities were not the focus of the research questions. Other limitations regarding learning and knowledge acquisition may also exist between academic learning and business environment learning but were not addressed because the focus is entirely on corporate training programs. Similarly, the research did not determine the impact of how trainers' treat trainees differently, as social interaction could have a positive or negative effect on learning (Derksen et al., 2015). Establishing a uniform training program may cover some aspects of knowledge transfer; however, it may not address the real needs of the individuals receiving the training (such as soft skill versus hard skill training; Laker & Powell, 2011). These potential limitations provide other research opportunities to continue this work.

Literature Review

The organization of the literature review is based on the variables that contribute to the process of developing training programs and the methodology utilized in the study. Because the development of self-efficacy is unique to individuals, the literature is organized based on the three elements contributing to this development. In the first section, I discuss how individuals personally learn based on their generational identity, which can create different generational needs. The second section includes the impact trainers have on employees' behavior in the development of efficacy. Lastly, the learning environment in which training occurs are discussed to connect how individuals are impacted by changes that occur during training. Together, the three sections provide the structure of the literature and the need to contribute new data and analysis from the proposed study. Recent comparable research has made the connect between self-efficacy and training in several industries such as education, hospitality management, medical research and treatment, and organizational training and development (Cherchem, 2017; Festing & Schafer, 2014; Gursoy et al., 2013; Kim et al., 2016; King et al. 2017; Tews & Noe, 2017). Because several industries are included in the research of the same problem, the impact of training on employees, an underlying problem may occur in the training industry. When issues such as the impact of generational differences influence work values and attitudes of employees lowers productivity, training of those workers is often suggested to fix the problem (Gursoy, Chi, & Karadag, 2013). Organizational culture changes like implementing training that involves different generational employees to address these differences may cause contention in the workplace (Cherchem, 2017). At the same time, to retain talent, knowledge, and skills in the workforce, employees must be invested in the companies' best interests to achieve such organizational goals (Festing & Schafer, 2014).

Because training is suggested to improve employees and the employees must be invested in the company, training must be considered as a benefit and add value to the employees. Otherwise, the perception develops that the training is a waste of time and money to both the employees and the company (Tews & Noe, 2017). When training address the needs of the workers, positive brand attitudes develop, and improved behaviors increase productivity (King, Murillo, & Lee, 2017). The resulting effect is that when employees' needs are addressed, training becomes more affective in an environment conducive to learning since employee are willing to further invest their time and effort to attain company goals (Kim, Kim, Han, & Holland, 2016). These connection in the literature demonstrate the path of research involving how trainers impact employees by addressing their needs so self-efficacy can be achieved.

Personal Impact in the Develop of Self-Efficacy from Training

Deriving from the experiential learning theory, the concept of abstract conceptualization or the grasping of the concept is significant in the learning process (Kolb & Kolb, 2008). An individuals' perceptual self-identification of their ability varies based on age and experience in the development of the self-efficacy of the learning outcomes designed for various training modalities. The creation of a work identity exists differently for individuals based on the number of years an employee has committed to a specific job (Singh, 2013). When changes occur within the workplace and training environment, changes also occur in the self-identity of the individual. A divide can develop as individuals that have vested time and effort into their work have established a greater identity within the company. Comparing individuals with a developed organizational identity, the harder it is to adapt to changes without having personal identity conflict in a multi-generational organization.

The concept of learning effectiveness can be correlated with the extent that the individual can process the information over time (memory) and the extent to which they understand the content to develop expertise. If the information is active, the individual is less likely to forget the content (Nembhard & Bentefouet, 2014). Individuals are

selective of content regarding memory, only accepting relevant content (Gunseli, Olivers, & Meeter, 2016). Training content must, therefore, be considered relevant, so participants process the information and do not discard what is perceived as irrelevant information. Understanding which employees are from different age groups, skill levels, and have personal interests will allow for more focused training that is relevant.

Generational differences. The age of an individual is often connected with the level of knowledge and experience as compared to others. Cekada (2012) categorized the multigenerational workforce as having four great divides: technology, communication, immediacy, and leadership skills. Within these categories, generalizations and stereotypes develop over time regarding how each generation is perceived by the others. Brunetto, Farr-Wharton, and Shacklock (2012) indicated that generational cohorts are dissatisfied with training and development programs across all groups.

Some potential problems may exist from the trainers attempting to accommodate different generational groups throughout the training program, causing the other groups to become unhappy or intimidated with the process. The shift in training methodology whereby implementing more technology-based modules to accommodate the perceived needs of the younger generational workers could distance other generational workers. Alternatively, the trainer could be trying to increase the level of effectiveness with the older generations by limiting the technology training methodology. The dissatisfaction with the training process and how the trainer attempts to accommodate each generational cohort with new methodology is the focus of this research study. Generational identity. Identifying how an individual learns (learning style), interacts with others (social interaction), and values knowledge acquisition (training effectiveness) are unique to every individual. Lyons, Urick, Kuron, and Schweitzer (2015) indicated that a person's age has meaning relative to experiences of the generational cohort. The historical events that are experienced intersect with each stage of the life cycle as identifiable points of reference. These events provide contextual profiles to identify with other individuals, therefore shaping values and learning processes. Individuals from different cohorts deal with current events differently given their previous experience, education, skill sets, and significance of the event (Campbell, Campbell, Siedor, & Twenge 2015).

Nakai (2015) proposed that when studying generations, three factors should be considered. First, use a cross-sectional approach to identify group differences in the current workforce. Alternatively, using a longitudinal approach to distinguish age, period, and cohort effects in the work-related variables. Lastly, document the work-related experience of a key age cohort in the society as to identify which group the individual identifies. These steps validate the boundaries of each generation by events and impact on everyone's life. Importance then exists in identifying with a specific group of individuals as shared experiences and stories create significance in life.

Identifying with a group, however, may not necessarily be the issue with training younger individuals. Current efforts are made to develop a transparent and authentic self-image in Generation Y individuals. The need to protect and maintain that image, within

their generational cohort in the future is necessary as social interaction increasingly dominates society (Lines, 2011). Communication over social media and through other technological available resources are used to search for approval and group acceptance from their peers. This social identity is contrary to previous generational needs, who have had extensive training on teamwork and soft skills in the past.

These specific skills may not need additional training in the younger generations causing current programs to create dissatisfaction within their group. Since this training model has been over utilized in repetition, identifying newer models to address these uniquely different workplace skill needs of the younger generations should result in improved training efficiencies. As individuals identify with a specific group or cohort that share similar experiences, generation generalizations do not apply to all individuals identifying with a specific group (Costanza & Finkelstein, 2015).

These generations are not distinct due to shared relational experiences; however, distinctions will emerge at the workplace due to values, ethics, and learning styles (Nakai 2015). Gradual changes over time in work-related variables including job satisfaction, organizational commitment, and turnover rates, as well as differences in personality characteristics (Costanza & Finkelstein, 2015). The trainer must then consider incorporating components that are identifiable for the generationally diverse workforce to create satisfaction, increased desirability, and effectiveness.

The current societal and workplace issues are unique to all generations, while individuals deal with the problems differently. Employees may identify with another generational group due to shared interests, work environment, or personal needs; not just based on age or proximity to a historical event (Campbell, Campbell, Siedor, & Twenge 2015). Core self-evaluation, representing an individual's subconscious, their ability, control, and evaluation of their personality remains constant over time (Judge, Locke, Durham, & Kluger, 1998). These reflections, self and how they relate to a group, will direct an individual's perceptions of how they fit in at an organization, impacting job satisfaction, and job performance.

Generational stereotypes. Ng and Feldman (2012) validated the stereotype that older workers are less willing to participate in training programs. If resistance exists, trainers must consider methodology and content as to make the training program more attractive to engage the students. These findings present significance since generational stereotypes are often used by management to justify certain groups of individuals to receive training. At the same time, the training programs ineffectiveness is blamed for the lack of attainment of organizational objectives while wasting capital expenditures and overhead costs. Insufficient evidence that generationally based differences in work-based outcomes exist (Lyons, Urick, Kuron, & Schweitzer, 2015).

A stereotype of the Millennials is that they are skilled at networking and building relationships, however, these skills may not be applicable to the workplace (Lines 2011). Phipps, Prieto, and Ndinguri (2013) alternatively stated that stereotypes of older generational individuals were not tech savvy or technology-minded, however, this stereotype did not apply to all individuals based on age or cohort identification. The generalization of stereotypes to put individuals in the same category develop from other generational groups' perceptions of what others are capable (or not) or skilled (or not) at accomplishing.

Steel and Kammeyer-Mueller (2015) confirmed these assessments regarding stereotypes as a lack of respect between generations, causing a conflict of interest and values. Since companies have been designed to have employees work together, not simply in isolation, the workforce is bound to have generationally conflicting interactions. The process of training groups or the training of individuals by someone outside of their cohort weakens the learning process to obtain and retain knowledge. As the information and the methodology do not easily flow based on expectations or goals of the different employees, less meaning exists causing inefficient and ineffective training.

Wang and Peng (2015) described how people are actively and subjectively processing the events, stimuli, and information differently to make sense of their own life. The misunderstanding of perceptions can cause contention when different generational groups are training in the same group. Frame and Ballah (2015) observed that no increase in learning benefits occurred from the service-learning format of having an older generation individual share stories and experiences with younger generations. Since the concept of generations are socially constructed, different cultures will vary on their interpretations of the concept and what constitutes generational uniqueness (Nakai 2015).

Campbell, Campbell, Siedor, and Twenge's (2015) addressed how different individuals deal with societal issues and should not be categorized based on age alone.

Clear characteristics that define generationally different individuals' unique styles adds value to each group. Generations, therefore, should not be used as stereotypes, as assumptions, or as perceived biases as they may not hold true for the entire generational group (Lovely 2012). Confirming these findings, Ng and Feldman (2012) found that age-based stereotyping is often over exaggerated and cause the grouping of individuals into generational cohorts to be an inaccurate practice.

Impact of the trainer's generational identity on the training. The age and generational identity of the trainer may impact how they create and deliver their training content. The cyclical nature of generations in certain fields such as teaching, or training, may increase the generational impact since the age divide may be more significant, jumping generations (Pendergast, 2009). Age stereotypes that are formed could then negatively impact the training session since perceived ability and needs will create an environment in which one or both sides do not participate to their potential (Finkelstein, King, & Voyles, 2014). The training session(s) could also be based on a different methodology which could decrease the delivery of content used in the program. The altered behavior based on these stereotypes can lead to conflicts between different generationally identifying individuals, such as the trainer and the trainee (Hillman, 2014). The resulting training was less effective as the trainer's effort to transfer knowledge and the trainees' willingness to accept it, will decrease due to these generational conflicts.

Generational training needs. Otey (2013) examined the changing business environment's need for employees who are ready to work, not just understand the theory

and text-based academics. The shift to prepare students towards the new technologybased demands of the industry means that institutions must implement new training and pedagogy. With a cross-cultural and intergenerational dimension present in the institutions, the focus of training has shifted towards technology professionalism, ethics, and best practice protocols for social media and other forms of technology-based communication. Each generation has identifiable needs, influences, values, work ethic, and degrees of respect and tolerance for others (Cekada 2012). Compound these characteristics with varying expectations, learning styles, and work-life desires, the generational mix becomes a complex system to manage and train effectively and efficiently. Since training programs are part of the life experience, social identity creates the need for predictability of attitudes and behaviors based on the training. Companies expect that training programs implemented address the needs of all individuals within the company, with a different methodology, material, or approaches of employees' needs.

Lines (2011) addressed how companies are incorporating new interventions into the training programs to accommodate Generation Y employees. Social media groups, online resource centers, and coaching and mentoring (both internal and externally) are customizable to the individuals' preferences. Weatherspoon et al. (2015) confirmed the use of interactive technology for Gen Y provided guided support with quality instruction while entertaining with point and click interaction. There is a lack of research supporting the effectiveness of interventions designed to address such generational differences (Costanza & Finkelstein, 2015).

Similarly, Cekada (2012) suggested that training Generation X employees should take place in small group discussions and teamwork with flexibility for learning methods. Conversely, training Generation Y should involve an exploratory approach involving simulations and role-playing while providing them with fundamentals on the topic. These different approaches to similarly aged employees demonstrate the need for further analysis and exploration of how to train both groups. The increased difficulty for trainers is training both groups at the same time with a different methodology, given similar or the same material.

Emotional intelligence is often used in conjunction with the cognitive level of employees to determine how they make decisions and can attain knowledge (Jiang, 2016). The perception of oneself versus the perception of others leads to valuations on ability and knowledge, causing inconsistent conceptions of ability (Martocchio, 1994). When the outside perceptions of management deem the need for employees to have training, because of the opinion of deficiencies in their duties within the company, selfperception of insufficiency develops, reflected in employee workplace behaviors.

Behavioral Impact on Training for Self-Efficacy Development

The goal of training is to develop knowledge and skills to increase performance based on the transfer of information from one individual to another (Hollenbeck & Brief, 1987). The process of setting goals for employees must involve an increase in the employees' commitment to gain new knowledge to accomplish the tasks assigned (Klein, Wesson, Hollenbeck, & Alge, 1999). There are two ways to reduce the cost of training: increase the number of participants per session or by reducing the proxy criterion when evaluating the learning effectiveness (Yang, Sackett, & Arvey, 1996). Since both the trainer and the participants have an impact on the training session, the positive and negative behaviors of both must be considered.

Trainers' behavior. Effective trainers may be very good at training but may not be experts in the content, and vice versa for ineffective trainers. Alternatively, experts in the content developing into effective trainers of such content may need significant practice and guidance to achieve such efficiency (Chingos & Peterson, 2011). Individuals may be highly qualified in their area of expertise; however, they are not trained in teaching methodology or curriculum design, causing the training session to be not as effective. An example of this paradox is when employees are forced to develop software systems to support their main role in the organization, however, they are not software engineers (Elliott, Dawson, & Edwards, 2009). The behavior of the trainer in the training sessions may not be accommodating or may not provide enough clarity of the content to create knowledge transfer.

Communication and knowledge sharing processes. For knowledge transfer to occur in training, communication is a key component in the process, so understanding occurs. When both internal and external teams work independently of each other, trust barriers may develop since the other party does not know what the others are doing (Herbert, 2009). Open communication becomes a crucial aspect of training and building organizational knowledge through learning. With the centrality of both processing and

using knowledge in interpersonal relations in different situations, coaching competence is required to identify the skills needed in each situation and provide feedback to groups and individuals (Valkeavaara, 1998). When trainers can provide guidance and instruction, there is greater understanding and trust in the process implementation given the reduction of unknown information.

When leadership responds to market changes, a business must have organizational readiness to deal with the challenges. When a greater understanding of change exists, the benefits of collective commitment within the company demonstrate more adaptive readiness (Rusly, Sun, & Corner, 2014). The behavior of sharing knowledge among employees with increased participation shapes the viability that the company can maintain a competitive stance. In determining the appropriate training behaviors for communications that provide the learning context is necessary to increase understanding and dedication of the training program.

Trainers may face contrasting behaviors within the training group causing potential issues that could negatively impact the session and decrease the trust of employees further. An emphasis on training and development of human resource expertise for management is a proactive approach to reducing organizational tensions and conflict (Link & Muller, 2015). When individuals construct their knowledge, selfperceived learning competence leads to confidence (Bagshaw, 2014). The trainer's design is important to address these specific needs and deficiencies of employees and management separately or in groups for training sessions. Knowledge sharing within the organization at different levels could occur if competence and confidence are the resulting exhibited behaviors of the training.

Knowledge transfer. The identifiable disconnect between generational learning differences and work-based outcomes indicates that underlying issues exist in training programs. These issues create discontent with training programs by management and individuals, despite the work outcome indifference (Lyons, Urick, Kuron, & Schweitzer, 2015). Outside forces are impacting the effectiveness of training programs (may not be the training programs themselves), given the outcomes remain in greater performance once training is completed.

Weatherspoon, Weatherspoon, and Ristau (2015) examined how the use of social media enabled a thorough understanding of information through enhanced communication channels. The individuals that had more access to the information where able to view different perspective on the information provided but needed to watch out for misinformation that was available such as on the internet. One explanation of the effectiveness of social media integration in training is how individuals can use the content. If the material from the training program remained in possession of the employee, for review or use at work, it is possible that the employees were completing a self-retraining from the material. The suggestion that the trainer's lack of effectiveness resides in the employees' ability to recall or gain access to the training material. Despite the trainer's effective methodology to engage the individuals in the program, different

generational individuals use the training material differently once the training programs were completed.

Leiter, Jackson, and Shaughnessy (2009) researched generational differences regarding work-life values as some generations have a current effect (perceptual value) much greater than other generations during the same period. These values and behaviors towards work pertain to training and knowledge acquisition as relatively important to the individual's position within the company. Communication across the generations has also caused conflict regarding knowledge sharing, generationally different individuals communicate using different methodology. Younger generations were then likely to exhibit a lack of commitment due to the reduced participation in the work as well as a lower level of interaction. Varying work values of employees from the different identifiable generations indicated the likelihood of burnout, turnover, and reduced knowledge sharing amongst the groups.

Resistance to training. Since the training process is the addition of new knowledge or skills, there is an understanding that a certain level of resistance to change occurs in individuals during the learning process (Oreg, 2003). Pessimistic viewpoints towards training and knowledge development result in anxiety or resentment for having to complete perceptually unwanted, undesirable, and unnecessary training programs (Prokopcakova, 2015). Higher levels of anxiety in the training of knowledge and skills affect the development of self-efficacy (Bandura, 1988). Training, therefore, is less effective if viewed by the employees as not helping or causing increased levels of stress,

which could reflect the organization and the work performance.

Alternatively, optimistic individuals can achieve higher levels of self-efficacy with lower levels of anxiety towards the training; allowing the training to be more effective (Prokopcakova, 2015). Generationally older individuals that develop selfefficacy demonstrate a greater level of optimism (Stanley, Novy, Hopko, Beck, Averill, & Swann, 2002). Those individuals that are more confident in their ability are also more willing to accept the changes in knowledge through learning (Sasikala & Anthonyraj, 2015). Therefore, gender, age, and emotional intelligence are all contributing variables in determining the level of anxiety that individuals can accept through the training process and knowledge acquisition.

Environmental Impact on Training for Self-Efficacy Development

Training sessions that involved massed (grouping) information allowed for quicker processing, however, the long-term effect of memory retention is not as lasting (McDaniel, Fadler, & Pashler, 2013). Training that is spaced out over a period has a greater lasting effect on memory of content. Grouping of content in the short-term can cause forgetting since the amount of information becomes difficult to process. Similarly, individuals can use their working memory to process information during the training sessions, and subsequent test, but may discard the information as they move onto the next topic (Dunning & Holmes, 2014). The working memory than would suggest that interval or spaced training would make individuals process and retain knowledge in memory as the training would extend over time. A method of improving the memory of content is by teaching learning strategy adaptation as part of the training sessions, so new information is accepted, not resisted (Bottiroli, Cavallini, Dunlosky, Vecchi, & Hertzog, 2013). By using strategies, content was considered relevant, active in the memory, and related to previously learned content so it can be grouped in the memory for a longer time.

Learning organizations. By focusing on the potential correlation between training employees to develop expertise and the issues related to the resistance to change can be viewed from multiple perspectives (MacCormick & Parker, 2010). An approach to determine how to improve organizational training and employee expertise include the capabilities and capacity of the organization to learn. Some existing tools can be used to evaluate the current needs of an organization to assist trainers in the instructional design. The Kirkpatrick training evaluation model utilizes four levels of assessment to determine the needs of an organization (Ho, Arendt, Zheng, & Hanisch, 2016). Additionally, Philips's five-level training evaluation model is used to determine the return on investment of a training program. Both models reflect the participants behaviors and attitudes during and post-training, however, do not account for the trainers themselves.

With the continued focus on the employees, cognitive strain and the ambidexterity of managers are two concepts that relate to employees' difficulty learning (Keller & Weiber, 2015). The cognitive strain is the difficulty in adjusting to something new, resistance to change, or difficulty processing problems at work. The measurement instrument used was the irritation scale by Mohr, Muller, and Rigotti (2005) with a Likert-type scale. Ambidexterity was measured using Weiber and Keller (2011) scale to determine if management can be effective in today's business while adaptable to the changing work environment. Managers were asked questions regarding their function engaged in activities that cover new knowledge and required the development of alternative approaches, given the complexity and unknown consequences.

Since support from superiors and co-workers reduces stress, the cognitive strain is reduced, correlating to the level of ambidexterity. Depending on which approach the manager decides, will impact the training the organization benefits from, based on the strategic plan. Thus, a consideration that was addressed in the research is whether trainers are expected to understand the company's strategic plan and objectives when designing learning outcomes or whether the company seeks out programs that already align with those objectives.

External trainers' impact on employees. Outsourcing has become an organizational choice to improve profitability through knowledge, skill, and leadership training of employees and management, alike. The decision to use such external trainers may, however, result in hidden costs such as dependency or reliability of the knowledge expertise (Mukherjee, 2017). Alternatively, assessment from the outside can provide fresh eyes to dig deeper into an organization or team, since internal employees may be blind to problems or issues (Foldy & Buckley, 2016). For organizational trainers to transfer knowledge, they must understand the original context of knowledge to embed new knowledge within the continuously emerging business environment (Chen,

McQueen, & Sun, 2013). Since professional outsourced trainers may have differences from the organizational employees, knowledge transfer between them may presents challenges (Larsen, Manning, & Pedersen, 2013).

For individual knowledge to become organizational knowledge, knowledge sharing must exist between the group and organizational intermediaries so that trainers can enable the creation of mental models in the employees (Chen et al., 2013). On-thejob training has been shown to be better suited for transferring skills to employees, while classroom training has been recognized as being well suited for the achievement of knowledge outcomes (Jacobs, 2003). When selecting an external organizational trainer, the decision must include whether to design training interventions, non-training interventions, or training that includes both (Sanders & Thiagarajan, 2005).

Once selected, the instructional design methodology must follow the proper application of adult learning best practices to achieve optimal training efficacy for both design and delivery (Caudron, 2000). The content becomes relatable and understandable when personalized presentations are utilized, evoking better learning achievement results than not having personalized training (Yang et al., 2014).

Such formal training program designs are significant in organizations where employees work is project-based, since the training can be directed towards the success of a single project (Aramo-Immonen, Koskinen, & Porkka, 2011). While external trainers may provide a more directed approach to training, they may also have more adaptability when it comes to changing the program to customize the content or methodology for a specific client or organization.

Alignment between the trainer and the organization must exist with the goal setting of the training programs (Gibson, 2001). Training and development programs are often used to improve failing projects since management will look to improvements in employees' knowledge and skills to revitalize the projects (Kilkelly, 2011). Because companies may be dealing with increased costs to improve the project, organizations may seek to find alternative training programs due to cost constraints or to meet such organizational goals.

One example of an alternative training program consists of self-managed training which has been shown to be a cost-effective way of improving employee efficacy regardless of culture or company location (Pattni & Soutar, 2009). These programs, however, may not be customizable, lack customer service, and create difficulty in embedding knowledge within the organization. Companies may then explore the options of external trainers who can bring about either knowledge replication, refinement, renewal, or recombination within the organization (Mukherjee, 2017). Finding external trainers that understand how to take a proactive approach to the training environment can be costly (Pace, Boykins, & Davis, 2014). Determining if trainers are proactive to address the needs of the diverse population within the training environment is addressed in the research questions of this study.

Training to position needs. When planning programs to train employees, the

ability to identify gaps or deficiencies in knowledge and skills needs to improve managerially (Lakshminarayanan, Pai, & Ramaprasad, 2016). These deficiencies can be identified through competency needs assessment and can be useful in predicting job performance. The assessment results could also indicate whether the change management should be conducted using internal, external, or both sets of trainers. One potential issue with the assessment of individual and organizational needs is the capacity to accept, learn, and retain the training information and apply the new knowledge to ones' job or on tasks within the organization.

Like mass production, different companies may need customized production runs which can be split into component production, pre-fabrication, or a combination towards customer-oriented in which manufacturing occurs on-demand (Nistor, Dehne, & Drews, 2010). The concept of customized training, however, significantly increases the cost of developing the training programs. Thus, one-size-fits-all learning environments do not consider the individual workplace requirements and problems. Further contributing to the problem, low-educated workers are less likely to participate in training programs as they have not adopted the life-long learning mentality (Sanders, Damen, & Van Dam, 2015). As a definable group, the low-educated workers' self-efficacy for learning increased when the training experienced was a positive experience.

Training and development of employees, groups, or teams to gain acceptance of organizational change is needed to address the needs of the whole company (Choi & Ruona, 2011). Additionally, trainers may need to determine whether employees are
ready to acquire knowledge through training by using individual assessments as opposed to self-directive teams in which training is specialized to their specific needs. If employees can develop expertise and efficacy of the content and job material, then performance should reflect greater outcomes and predictability of the future performance (Grant, 2014). This study shows connections between training and the development of efficacy so leadership can make decisions on how best to establish more efficient and cost-effective training.

Leadership's role in the training process. Companies often invest in research and development to increase the absorptive capacity of employees, the ability to use existing knowledge to acquire and assimilate new knowledge (Cohen & Levinthal, 1990). The continued investments, however, are usually stipulated by return on investment criteria and bottom-line costs assessment, which is hard to calculate regarding the effectiveness of learning and knowledge advancement from a given training programs.

The leadership of organizations encounters several challenges regarding the implementation and how to manage the training process. Since training involves new information and potentially new skills, leaderships' limited experience with the current changes or innovations could reflect negativity on the employees' attitudes; causing resistance (Bordia, Restubog, Jimmieson, & Irmer, 2011). Since leadership can influence the change, a change champion is often used to set the precedence to involve all employees in the process (Appelbaum, Degbe, MacDonald, & Nguyen-Quang, 2015). The difficulty of anticipating conflict caused by training may result in self-serving bias or

change opposition since the needs of the employees were not met (Gibson & McDaniel, 2010). If these issues are not addressed, the innovation or new system will not be successfully integrated into the company without additional costs for technical support and outsourced consultations.

Another challenge for leadership is the increased use of self-directed teams that function independently and without much influence from organizational leaders (Stone, 2010). The decision to train employees and teams becomes more significant since guidance, instruction, and even motivation techniques may not be effective within the team environment. The perceptions of the leadership by the employees influence the beliefs that the organization can accomplish the change objectives and goals (Borgogni, Dello Russo, & Latham, 2011). If the relationship between the employees and management is weak, training may need to address the development of organizational efficacy.

With the globalization of companies, leadership should cultivate leaders to prepare them for their leadership roles as figurehead leadership models no longer work in the interdependent, changing organizations (O'Connor, 2015). Leadership then must decide to implement proper leadership training programs, so new leaders are prepared for future organizational changes. Four leadership competencies are identified for leadership expertise: analytic skills, self-management, relationship management, and action management (Lakshminarayanan, Pai, & Ramaprasad, 2016). These competencies provide the ability of the manager or leader to process information, be adaptable to context, and positively influence employees during the change process. Competency and skill identification are necessary for leadership to indicate training needs within the operational levels of the company. The various levels of organizational employees were explored in the research since the design of training programs may vary between management and employees.

The role of leaders is to gain expertise and knowledge in the change process that will occur so change management is effective. By gaining an experts' self-perception of work and outputs causes the management to specialize their skills as a change agent, trainer, or manager while establishing their role within the organizational setting (Valkeavaara, 1998). The effectiveness of the overall organization, however, relies on these individuals to work beyond their specialization role by expanding their knowledge of new information and ability to strategize the company's change processes. Training, therefore, may be needed to communicate the needed information, expand skill sets, and inform leadership on the multitude of strategies that are being implemented during the change process.

Training expertise. Alutu (2006), suggested that the trainer/instructor must guide the learner through the training process utilizing not only content but also appropriate learning theories. The right tools, knowledge, and skills are needed to gain the level of personal reflection that would deem employees as an expert. For employees to gain expertise in knowledge and experience, content must be learned and retained. As visual working memory is limited, individuals' performance only improves with training

when more effective retrieval cues exist, and better-organized information enables greater access to long-term memory (Beck, Martin, Smitherman, & Gaschen, 2013). Differentiating between actual expertise and expert performance is relevant to performance outcomes in which an expert-level is considered (Beck et al., 2013). If short-term performance does not reflect high levels of expertise, trainers should redesign training programs for leadership to acquire the expertise for long-term knowledge.

Further disconnects occur when expertise may not predict one's performance on tasks since knowledge levels, and ability to perform are not correlated. These concepts can be applied to the example of leadership development programs involving the top management training the companies middle management to be the future leaders of the business (Lawler, 2009). Organizations cannot just gather a group of managers with expertise and expect that they are able to work effectively together as the various skills and level of competency which may not be compatible. Resistance to change adds to the complications of developing expertise and creating organizational change culture (Appelbaum, Degbe, MacDonald, & Nguyen-Quang, 2015).

Other internal training programs, such as the delivery by human resource practitioners provide training and career development to foster learning capacity at all levels of the organization. The integration of a learning culture into the business strategy, while setting higher quality performance goals, engages workers in increasing their learning and work capabilities (Valkeavaara, 1998). The development of human resource development expertise is not a static process as continual development and learning must be a goal, given the changes and innovations occurring within the organization. The dilemma is whether the internal employees are experts in the company and the change in processes or whether additional assistance is needed to conduct training. Thus, the decision whether to use, trainers that know the company but may not be experts in change processes (internal) or private individuals that know the change processes but are not aware of the culture and norms (external), is complicated.

Capacity to learn from training. When assessing the learning capacity of employees, management, and even the organization to learn depends on the individuals' readiness for the training and the impact that the internal and external influencers have on imposing the change (Choi & Ruona, 2011). The influence of the trainers is only useful when employees are willing to learn from the lessons, content, and knowledge shared. Potential absorptive capacity is the company's capability to identify, acquire, and incorporate information from external sources into work routines (Zahra & George, 2002). The transformational capability to operationalize information and exploit sources of knowledge expands the company's capacity and receptivity for new and innovative routines.

Some companies may utilize information and communication tools (ICT-tools) to broaden the flow of external knowledge into the organization to realize the company's innovation potential and absorptive capacity (Gressgard, Amundsen, Aasen, & Hansen, 2014). These tools have the potential to increase the efficiency of knowledge management processes if accessibility and reliability are provided across the

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organization. Despite such technology, organizations have limitations regarding the ability to recognize the value of new information, use it, and apply the knowledge to daily operations. The responsibility falls on the trainers to try to get employees motivated and accepting of such new technology systems, given the forced implementation by managers, despite employee feedback and resistance.

Managers and employees also face the stress from stricter rules and regulations while experiencing the pressure to perform and learn decentralized responsibilities from the human resource management on these new systems (Link & Muller, 2015). Employees and managers alike will avoid, ignore, and suppress potential conflict and tension, leading to unprofessionalism and detrimental organizational behaviors. Similarly, overconfidence leads to an overestimation of ones' ability; thereby employees will refuse to ask for help when truly needed (Azouzi & Jarboui, 2013). The avoidance of weaknesses causes these employees not to seek training, even though the need exists. The combination of the lack of confidence for some, with the overconfidence of others, creates difficulty in training these individuals in groups simultaneously.

The concept of expertise means that an individual has developed some degree of mastery of content to be considered an expert. Expertise is a hierarchical structuring of knowledge with the complex interconnectivity of the concept map for mental processing (Kivilghan & Kivilghan, 2009). Some limitation variables include the amount of time training, rapport with the trainer, learners' ability to develop more complex knowledge structures, and adaptability to the training (Kivilghan & Kivilghan, 2009). Since most

organizational training is completed within the group setting, the influence of others within the training session may have a greater impact on the capacity individuals learn. The trainer, conducting formal sessions rather than collaborative meetings, may limit the employees from working together to solve problems.

Group dynamics. For training sessions, employees may have unique group dynamics whereby interacting with various employees differently. Within a training group, however, there may be several individuals of different age, knowledge and skill levels, which all impact how individuals work together. A group dynamic refers to the age of employees in relation to their company position with concern for how they perceive training and learning new systems in a changing work environment. Age has been shown to be a significant factor in the unwillingness to participate in training since change and commitment to the learning process develops anxiety and fears with older workers (Cau-Bareille, Gaudart, & Delgoulet, 2012). If these resistive forces exist within part of the workforce, additional employees may feed off these reactions, adding to the difficulty of implementing the new knowledge. Since the process of change creates anxiety for some, the design of training material and the handling of the course content could add to the uncertainty or mismanagement of the group being trained.

Organizations that create working teams can develop group dynamics with individuals working together regardless of skill levels, as to improve organizational knowledge and process learning (Stone, 2010). A Kaizen team is an example of employee groups that serve as part of the change initiative to incorporate individuals with various skills and knowledge to work in a cross-functional capacity to address everyone's needs. Trainers that devise training systems that link the content of training with specific working activities across different levels of the organization, however, may encounter difficulty addressing all employee needs within the groups.

Literature on Methodology

The selection of a quantitative research study methodology was made by this researcher as to expand the scope of perspectives in the field of training and development. As much of the literature and research studies are based on qualitative perceptual insight from the employees, little research reflects the perception of the trainers and how they impact the training. Much research utilizes the qualitative research methodology as to gain the life experience stories and perspectives of individuals in the field. By doing so, trainers' perspectives are a neglected variable in the business environment whereby addressing generational differences and various position levels, may have a significant impact on the training of employees.

Summary and Conclusions

In conducting a thorough literature review the seminal authors Mannheim, generational identity; Piaget, cognitive development; Skinner, process learning; Sweller, cognitive load; and Bandura, social-cognitive theory, reflect the need for further understanding of how trainers develop self-efficacy in employee based on their training programs. With the variable of generational difference, employees' values on training and self-transcendence, all influence how much commitment employees feel towards an organization (Matherly, Amin, & Al Nahyan, 2017). Other variables that influence the development of learning are the individual's belief that they can achieve their goals, self-efficacy. The learning experiences can be tracked with performance outcome achievements and employee feedback. The assessment of the needs of employees, however, may not reflect the feedback, as feedback may not be given, in which silence constitutes a positive outcome.

Gaining the perspective of trainers, instead of the trainees, could shed light on the impact the design of programs has on the training session. Learning can occur from training, but also the reviewing of content as to remains fresh in the memory (Cho & MacArthur, 2011). While goal setting theory supports performance outcomes, management must understand the capabilities of workers as to set realistic goals so that training can align with individual needs (Neubert & Dyck, 2016). Efficiency in training, streamlining, time-limitations, and reduced expectations do not align with effective training methodology (Lambert, 2016).

As outlined in the literature review, the subsections include the three main areas which impact the development of self-efficacy. The generational stereotypes that exist could cause a trainer to perceive the trainee's motivation towards the program negatively. The behavioral development of self-efficacy includes the decisions of leadership on training programs, knowledge sharing, and resistance to training employees exert. The environment for the training includes the leadership and organizational support, individual or group learning, and the training program platform. Employee performance is dependent on the perception that the organization has efficacy to attain the goals (Latham & Piccolo, 2012). Differences in individuals' perceptions can then alter the effectiveness of training and development whether based on the various influencers. This examined how trainers align their training programs with the different variables of age and position level within the organization could determine why self-efficacy. Understanding these differences is the basis for the research study to further expand the literature on training and development of efficacy in employees. The explanation of the research design to collect the data from the trainers is explained in Chapter 3. Key sections included research design and rationale, methodology, population, data collection, pilot study, and data analysis.

Chapter 3: Research Methodology

Introduction

The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization. Efficacy is increased through knowledge transfer, which can be applied to the job in the future (McCracken et al., 2012). It is also important for trainers to spend time teaching trainees how to utilize the information in the future to increase knowledge retention (Awais Bhatti et al., 2014). This chapter presents information on the design and methodology of the study as well as ethical procedures.

Research Design and Rationale

As the research design is based on the research questions, a correlation study was selected to compare the relationship of the dependent variable with the independent variables. The variables for data collection were the different generational needs of employees, the methodology used by the trainer to deliver the content, and the employees' position level in which trainers would implement change to the programs. These variables were correlated with the dependent variable, the trainers' focus on the development of self-efficacy in a training program.

Other methodologies such as qualitative research was not used as the breadth of the population was favored over gaining depth of perspective. I utilized a survey instrument to gather information that can expand perspectives (Babbie, 1990). Experimentation was also not favored because the goal was to achieve correlation between variables to indicate what is happening in the industry.

Data sources in the training industry include association membership, established outsourcing company employees, and direct selection of companies that use organizational training programs. Initial survey questions included criteria individuals must fit to participate in the survey. Criteria included individuals who have conducted at least some training in the past 5 years, used various training methodology, and who have encountered different generations within their session. Other categorical data collected involves the trainer's age, the highest level of education, the number of years of experience conducting training, and type of training modalities used. The data gathered from these questions enabled grouping of participants so correlational modeling can be performed. The criteria for population sampling also established the reliability of the study as being replicable.

Methodology

With the selection of a quantitative correlation study involving a survey questionnaire to gather data, the importance of determining who should be surveyed and which questions would result in useful data. To compare several variables to show a relationship among them, a correlation study was selected. The following section explains both how the research developed the appropriate survey instrument and how the population was selected to gather the data. The research plan involved non-probability purposive sampling to gather information from a cross-sectional survey questionnaire designed for three reasons. The first reason the population was selected was the accessibility to the vast number of organizational trainers. Second, significant diversification of trainers was needed to gain a generalized perspective of the current industry practices; whereas, a smaller sample potentially would not reflect the industry.

Third, because the population is large, this would provide a large enough collection of data provide analyzable results. The sample was selected to provide realistic information of the current professional training environment. To allow the study to be repeatable to attain the same results, certain criteria must be met for the sample population to gain similar answers upon repetition of the study. The criteria were necessary because individuals who do not meet the criteria may answer the survey questions differently or may not be able to answer them.

The judgment or selection process was done with an established criterion as to justify the selection of those individual participants for the sample population (Balogun & Olanrewaju, 2016). As my target population was made up of organizational professional trainers working at various global organizations, the participants are globally dispersed across businesses in many different countries. The population characteristics are not easily attainable because professional trainers are globally diverse, and the membership population of the training association may not be as diverse. Quota sampling was not used, as getting a sample population that is reflective of the actual population is not possible without surveying multiple organizations, and access to those other populations was not established. Because the target

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sample was specific to a certain group of individuals within a larger category population of human resource learning and development employees, it was necessary to identify these specific individuals with purposive sampling.

Because this was a correlation study, effect size using r^2 can to be reported, the coefficient of determination. R^2 is the proportion of variance shared by the two variables and does not indicate the direction of the relationship. To calculate if R^2 is needed, multiple correlations are sqared, which indicates a measurement of how well future outcomes are likely to be predicted by the model. ANOVA statistical test alternatively can be utilized to compare group means on the data.

A medium acceptable effect size is 0.45, which was used in G*Power testing to determine the appropriate sample size (Lipsey, 1990). Alternatively, an r-value of 0.1, 0.3, and 0.5 respectively indicated small, medium, and large effects (Cohen, 1988). By running a G*Power 3.1.9.2 test with the parameters of the effect size of .3 and β = .05 two-tailed *t*-test a priori correlation, the resulting sample size was 134 participants with the power of .95092, degrees of freedom at 132, and the critical *t* was 1.97809.

Survey Questionnaire

With the purpose of understanding the relationships between organizational training programs and generational difference needs in the development of self-efficacy in employees, data were gathered using a multilevel correlation survey research design. For the development of the new survey instrument, several models were utilized as guidance. These validated instruments have already been used to collect data on the effectiveness of training within an organization: outsourced training scale (Galanaki, Bourantas, & Papalexandris, 2008), MLQ 5X (Dadke, 2016), a questionnaire of personal self-attitude (Serdiuk & Penkova, 2015), and the generalized self-efficacy scale (Schwarzer & Jerusalem, 1995). These tools are often used by companies in determining whether training is needed in the organization; however, the tools do not address the trainers' perspective on the development of self-efficacy. Because of this, a new survey instrument was created to gather data to answer the research questions.

By using a Likert-type response, the survey questionnaire included close-ended questions and can be statistically analyzed by assigning values to each answer. Judgment is still involved for the participants to determine how often they made changes to their training programs, as reflected in the answer selections. As past experiences of training were needed to answer the questions, having current experiences was preferred for easier recall on what happened in the training sessions. There were also qualifying demographic questions that participants had to answer for identifying other confounding variables that may impact the study. Appendix A and B include survey questions distributed to participants to complete during a 2-week period, submitted anonymously. No questions had information to identify a participant's identity specifically.

Scaling

Studies have included Likert-type scales for a survey questionnaire to gain participants' self-reflection rating on how they feel, which would provide insight into self-efficacy (belief in the ability to achieve personal goals) of the participants. These groups of data can be graphed to show relationship between the various participants and the correlation between how they feel for each of the survey questions. For example, Kitching, Cassidy, Eachus, and Hogg (2011) calculated the self-efficacy of students with a 6-point Likert-type scale including the options of strongly disagree, disagree, slightly agree, agree, and strongly agree. Cronbach alpha was calculated to determine the internal reliability of how well each item correlates with the total scale score; from the 68-item scale, .93 internal reliability existed.

Additionally, Clark, Brey, and Clark (2013) all used a 6-point Likert type scale with the options of *not confident, slightly confident, somewhat confident, fairly confident, quite confident, and completely confident* for 29 questions. Their pilot study included 109 participants with a Cronbach's alpha coefficient score of .73 to .85 for the subscales and a .94 reliability for the total instrument.

Two additional survey instruments were considered for use to achieve the data that measures how trainers develop self-efficacy in employees. The two instruments use a Likert-type scale to measure participants responses. The development of self-efficacy has been measured with the generalized self-efficacy scale (Scwarzer & Jerusalem, 1995) and the teacher self-efficacy scale (Schwarzer, Schmitz, & Daytner, 1999). The generalized self-efficacy scale used a Likert-type response format with a scale of 1-4. The teacher self-efficacy scale uses a similar 1-4 scale with the questions geared toward elementary school teachers. Both scales reflect a level of truth in which the participant agrees or disagrees with the statement within the question. The new Likert-type scale utilized a 1-5 scale with the following scale answers: None of the Time (0%), Not Often (25%), Some of the Time (50%), Most of the Time (75%), All of the Time (100%). I used this scale to determine whether organizational trainers are addressing the needs of specific individuals within the business; understanding how often they change their training style indicates their efforts to address these specific needs. A lack of changing their training style would reflect the inability or lack of willingness to address employees' specific needs as the trainers would, therefore, have less impact on the development of self-efficacy.

The validated survey questions for the generalized self-efficacy scale were referenced for the creation of the new survey. These questions indicate how individuals feel about their capabilities and belief that they can perform a task (Schwarzer & Jerusalem, 1995). The questions listed for the teacher self-efficacy scale would need to be altered as the professional trainers do not deal with parents and the learners are all adults (Schwarzer & Jerusalem, 1999). Developing a new scale based on these two scales was possible to focus on adult learners and trainers' ability to develop self-efficacy in employees. Andragogy, or the concept of adult learners, would be an additional theoretical foundation regarding transferring of information in the business environment (Santos, 2012).

Further, connections in the literature were made to construct the conceptual maps related to the hypotheses, which helped develop the survey questions (see Figures 2-4). For instance, generational differences have been emphasized with the impact trainers have on adult learners to accept training and increase knowledge, as self-efficacy develops differently based on age or experience. Additionally, determining whether changes occur in behavior, teaching methodology, or changes in content based on the business environment and employee position were the main theoretical bases of the research questions.

Stereotypes or grouping of individuals based on certain characteristics (i.e., generational differences, level within the organization, and training methodology) impact the behaviors of the trainer, which, may impact the training session and how trainees learn. If the learning environment changes, then there is a potential impact on the development of self-efficacy. Determining how to deal with such an impact would allow others to address these problems differently regarding dealing with various employees within a diversified business environment.



Figure 2: Linking training with the development of self-efficacy based on employee level

within the organization.



Figure 3: Linking training with the development of self-efficacy utilizing different

training methodologies.



Figure 4. Linking training with the development of self-efficacy utilizing different

training methodologies.

Population

The viewpoint of the trainers is a variation from the typically surveyed managers or employees, who only indicate what they need or whether they like or dislike the training. Questioning the trainers on their approach allows for a different perspective and adds to the literature on training and development. Because the complete models were not used, combining the questions required revalidation of the questions and reliability checking, as well as a pilot study. Organizational corporate trainers were the target population for the study because they have the experience needed regarding conducting training at various organizations with different sets of employees. The purpose of selecting these individuals was the gain an overview of how the industry addresses the current issues reflected in this study.

Sampling and Sampling Procedures

The selection of participants for the study was based on purposive sampling so external/internal organizational trainers were targeted to obtain alignment with the research questions. These targeted participants all had recent (within the past 5 years) training experiences or had delivered or developed training programs as the basis of their external training experience. These groupings were necessary for the participants, so they understood the meaning of the survey questions and could provide answers based on real experiences, not just reflect the market or industry expectations. Several organizations have developed around the concept of organizational training and served as potential research participant pools if the proposed association did not accept the proposal.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

Upon IRB approval, a request was sent to the community partner, an organization that conducts survey research in many industries. As required by the online company, the survey was distributed through the survey instrument utilized by the company, with complete access to the researcher. The data collected was not altered; but cleaned for purposes of this academic doctoral research study. Because individuals' work within the training industry, obtaining enough completed survey data to make the study analysis significant, was possible.

The survey was emailed out on Monday morning with the link to the survey to maintain confidentiality of the participants. Within the email, a description of the purpose of the survey and instructions on how to complete the survey were included. Participation was entirely voluntary with no obligation to complete the survey, as participants were able to stop at any time. When participants clicked on the link provided in the email, participation was understood as individuals put a check in a box which indicated willingness to participate in the survey. Further description of reliability in sample size is explained in the sampling section of this chapter.

Demographic Information

The participant pool data were analyzed with correlational design. Single answer information such as the participant's age range, education level, number of training conducted each year, and number of years conducting training was the first set of characteristics gathered. While multiple answer questions such as training population position level that they trained, and training methodologies used. Participants answered multiple answer questions with other as an option, indicating an answer not listed.

Pilot Study

A pilot study was conducted to validate the survey instrument. A non-probability purposive sampling design was utilized to gathering information from a cross-sectional survey questionnaire design (Balogun & Olanrewaju, 2016). One limitation of non-

probability purposive sampling was that bias may occur with and within the sample population because those individuals selected may provide the answers desired, without reflecting reality within the population. Because individual participants were likely to reflect what should be done, instead of what they do, the results may indicate a Type I or Type II error. Despite these potential limitations and errors, purposive sampling was shown effective to represent the larger population (Johnston, Strong, Gargett, Jull, & Ellis, 2014).

The purpose of the pilot study was to validate the survey questions, as to determine if the questionnaire would return useful data. The pilot study involved individuals that were part of the target population, organizational trainers, who provided feedback on the questions designed. The pilot study consisted of 22 training professionals that confirmed alignment of the survey questions with the research questions. These participants were asked if they understood the questions and provided feedback on how to improve the questions for the study. Such feedback provided alignment of the survey questionnaire with the population of the study which added validity to the survey. The survey was distributed via email to pilot study participants, with a link to the survey tool with access to the questionnaire. A shorter period of 1-week was used to gather all survey responses through the internet-based survey tool since limited participation was required.

The purpose of the pilot study was to see if the gathered data from the population will reflect significance to address the research questions. The pilot study also used

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purposeful sampling from the population of training professional to test the questions before distribution on a larger scale. The changes were minimal wording changes to focus on the target audience and create a more thorough understanding of the questions for the participants. Once complete, the survey was distributed to the population for completion.

Instrumentation and Operationalization of Constructs

The quantitative survey questionnaire was designed utilizing an internet tool, in which participants received a link via email which took them to the survey. A new survey construct was created to gather the necessary data to address the research questions for correlation purposes. The survey questions were inserted into the survey tool were completed in cooperation with the research department.

The demographic section of the survey was developed and was approved by the researcher's committee to assess that participants are organizational trainers who have either designed training programs or conducted training sessions, depending on the methodology utilized by the trainer and the organization. These questions included such information as training methodologies used, type of organizations the trainer worked with, the organizational level that the training was conducted, and the educational/experiences of the trainers themselves. The information also provided the ability to conduct additional analysis and correlation of variables in the study.

Holton, Bates, and Ruona (2000) designed the learning transfer system inventory, as utilized for the learning transfer questionnaire, which investigated three factors of training: the influence of the transfer, diagnostic instruments used, and a change process model. The learning transfer questionnaire was referenced in determining the new questionnaire instrumentation since it was used to determine problems with learning transfer as related to the intervention of training, employee assessments, to evaluate existing training programs, and the creation of needs assessments. One area the learning transfer system inventory did not reflect the information of the trainers' ability to conduct the training when information was not known. Because of a lack of current survey instruments, a new survey was designed to address the research questions in this research.

Data Analysis Plan

Once the data was collected, statistical analysis of the resulting data was generated from the online software as well as using statistical software. Regression analysis of the data produced charts and graphs for visualization of the relationships that may or may not exist between the variables of the research (Quintana, Park, & Cabrera, 2015). The data was cleaned first, before analysis was run, as to make sure no answers were left out, or incomplete surveys were used in the analysis. The information from such surveys was removed from the data collected, as incomplete data can skew results.

Several statistical tests such as the *t*-test, Pearson's r, and regression were utilized. The *t*-test indicates the direction of the differences between the sample means and the comparison values. correlational assessment was performed using the Pearson's r, the standard correlation coefficient. Comparisons were made between the variables of generational needs changes, methodology changes, and position level changes made by the trainers. Because these changes were indicated on a Likert-type scale based on time, the relationship was drawn to show how often these changes were made based on the other variables. The dependent variable of addressing the development of self-efficacy based on the independent variables.

Such confounding variables would not be addressed in the analysis are the content of the training, how long is each training session, or the type of organization in which the training is being conducted. Although these variables could cause the development of self-efficacy to occur in the employee and trainees, the variables focused was on the trainers. Additionally, since time was a factor in the development of self-efficacy, the survey questions were not designed for the trainers to try to determine if self-efficacy occurred in the trainees, instead, if the trainers focused their training so self-efficacy could occur over time.

As mapped out earlier in the chapter, the dependent variable and the three independent variables were utilized to form the three research questions and the associated null hypotheses. The research questions and hypotheses were used to address the problem statement for the research.

Research Question 1: What, if any, is the significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees?

 H_01 : There is no significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

 H_11 : There is significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

Research Question 2: What, if any, is the significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees?

 H_02 : There is no significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

 H_1 2: There is significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

Research Question 3: What, if any, is the significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization?

 H_03 : There is no significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization. H_1 3: There is significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization.

Threats to Validity

External Validity

If the anticipated percentage of participants responded to and complete the survey, external validity would exist. Because the sample population consisted of various individuals from the target population, the analysis and suggestions for future research apply to other trainers that meet the same criteria as the participants. The potential for generalization of the results across a larger population created external validity for the survey.

Confounding variables were of concern because causality could not be established. Changes in the variables used for data analysis would also alter the suggestions and recommendations. The specificity of variables would be an issue if participants did not understand what was meant by the terminology used in the survey questions. Additionally, the tested results, focused on the variable relationships with singularity and correlation that addressed the research questions.

Internal Validity

One potential threat to internal validity was statistical regression. Since one population was sampled, it is possible that the scores would regress to the mean on subsequent tests. If extreme scores occur and the measurement of the dependent variable

is not perfectly reliable, a reduction in regression approach should be used if the inverse relationship to the reliability of the test does not occur. An example of how to address this problem was with a thorough explanation of the terminology used in the survey questionnaire, so interpretation of the meaning was uniform among participants.

Construct Validity

Threats to construct validity would consist of the concern that the Likert-type scale from the survey does not address theoretical ideas addressed in the research. By numerically identifying the terminology used in the scale, the participants should understand the percentages over time. Scale purification was needed, so participants were not confused by the terminology or percentages of which were set for the survey questionnaire (Wieland, Durach, Kembro, & Treiblmaier, 2017).

For example, "none of the time" was equivalent to 0%; while "some of the time" was equal to 50% of the time. Further examples were provided in the introduction to further expand on the concept, 50% of the time would be 20 out of 40 training sessions. Since participants may not keep such an accurate account, judgment of estimation on such numbers may not accurately reflect the answer they selected as compared to what they truly were doing. A request for participants to reflect accurate answers, as to reduce over or underestimations, was in the introduction of the study.

Ethical Procedures

Since the population that was surveyed does not include individuals that are part of a protected grouping, standard procedures were utilized for the study to make sure the identity of participants remains anonymous. All procedures were provided to, and approved, before the survey was used for a pilot study and subsequently released to the sample population of participants.

All participants checked a box on the introduction page, which constituted their willingness to participate in the survey. The agreement also constituted permission to use the resulting answers from the survey questions to conduct this research. Additionally, because the researcher was not directly connected to any of the participants from the organizations that may participate in the survey, no conflict of interest existed.

No other expected ethical concerns existed regarding the data collection process. Achieving an acceptable percentage of participants that completed the survey in a timely fashion was expected and achieved. As the survey had a limited number of questions, the expected time to take the survey was considered limited, approximately 10 minutes with no occurrences of over-exertion or excessive time consumption were expected or reported. If any exceptions were to occur, extra time would be needed to grant the participants an appropriate time to complete the survey.

All data was downloaded, and triple backed up on removable hard drives once the survey was closed for completion. Data was also stored for a minimum of 5 years on such drives, as well as all the data transferred to private servers or hard drives for future storage purposes. Data remained anonymous throughout the process as the identity of the individual holds no value. The only indicating information that does hold value is that the participant were an organizational trainer as to address the research questions.

No other known ethical issues were documented as participation in the survey was completely voluntary, the participants were not known to the researcher, and the research did not have any interest or power differential over the individuals participating in the survey other than to collect data. Any incentive provided to the participant were not from the researcher directly, while participants who complete surveys were paid by the community partner on a monitored basis. Since the monetary incentive was available, the company validated that the participants were screened and met the criteria established by the research.

Summary

The research design was established so a cross-sectional correlation study could be conducted with participants that are organizational trainers. The survey tool and population were used in cooperation and distribution of the survey was emailed to screened participants that met the criteria. A pilot test was conducted, tested the validity of the survey questionnaire, and adjustments were made to the wording of the questions to create greater understanding of the questions. An email was sent to all potential participants with a link to the survey tool in which to access the survey questions.

The online survey distribution tool used, assured reliability of service, and costeffectiveness for the research. The resulting data collected was then be analyzed, graphed, and information transferred to other statistical programs for further analysis. The data was backuped up and storage procedures were conducted to ensure that validity of the data was maintained over time. The Chapter 4 reported on resulting data collected from the survey, as well as the statistical tests analyzed. As described in Chapter 3, the statistical tests included a *t*-test, Pearson correlation coefficient R, R^2 , and ANOVA. The dependent variables were analyzed against the independent variables to test for correlation as well as other demographic confounding variables. The analysis should address the research question and help determine if the hypotheses to address the research questions with Chapter 5 Conclusion and Suggestions sections.

Chapter 4: Results

This survey study was conducted to address the research questions and purpose related to organizational trainers' impact on employee development of self-efficacy.

Research Question 1: What, if any, is the significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees?

 H_01 : There is no significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

 H_11 : There is significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees.

Research Question 2: What, if any, is the significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees?

 H_02 : There is no significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

 H_1 2: There is significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees.

Research Question 3: What, if any, is the significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization?

 H_03 : There is no significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization.

 H_1 3: There is significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization.

The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization.

In this chapter, the data shown to address the research questions based on the analysis of the data. The created survey was used in a pilot study to determine if any changes should be made to improve the results. The survey questionnaire was then administered through an online research tool with the targeted population of organizational training professionals. Valid data were collected from 146 participants who met qualifying criteria. The data were then analyzed and tested using statistical software.

Pilot Study

The data collection for this study was modified with a resubmission to the Walden University IRB for approval, which is further discussed in the Data Collection section. The community partner was changed as the source of participants without changing the scope or target population to gain more substantial participation. The pilot study was still conducted with industry experts in the field. These participants were not included in the final study, to avoid any bias or double counting.

The pilot study was sent out to members of an association that conducted training to determine if the questions in the survey were appropriate and would generate quality results. The pilot study resulted in 12 returned responses that indicated that all that received the study had completed the survey. Suggestions were made to change some qualifying questions' wording, to filter out individuals that had no training and to include not only external trainers, but also internal trainers because many training sessions take place at place of employment.

Additionally, participants in the pilot suggested that the interpretation of wording would create a limiting factor for some of the questions and for the qualification questions. For example, how an individual identifies their role within the company could be different based on their actual title, instead of what they do in their role for the company. An example of this would be a human resource manager, by title, who conducts many training sessions within the company, but would not identify as a
corporate trainer. Therefore, I changed the wording to include employees who conduct training and not trainer by title alone.

Data Collection

The data collection followed the outline approved by the Walden University IRB, (approval #05-01-18-0540720). Initially, the survey questionnaire was sent out via email and social media to a community partner membership database, with the intention of collecting data for 2 weeks. The initial 2 weeks only returned minimal resulting participation, causing the need to extend the survey and resending the email and social media out to the population again. The second and third 2-week period were also not productive. Therefore, I decided to change the community partner because the necessary participation was not achieved. Submission of a revised IRB was approved with a new community partner and data collection tool under the same IRB approval number.

Upon the revised approval, the survey was sent out to Qualtrics users, targeting members who met the population characteristics for the survey. Because many employees do not hold the title of organizational trainer, individuals who reported conducting significant amount of training per year were eligible to participate. The change in collection was a cost-effective alternative given the initial attempts that failed to produce participants.

Study Results

The survey included a total of nine qualification questions followed by 18 survey questions related to whether trainers made considerations, based on frequency regarding the development of self-efficacy within their organization. Some measures were taken to ensure that the results came from the desired population of trainers within organizations who have a role in conducting training either internally or externally to the organization. First, all participants had to consent to taking the survey and indicate that they would answer all questions honestly, promising to provide the best answers. If a participant indicated that they had less than 1-year experience or conducted zero training sessions in the past year, they were not allowed to complete the survey. Qualtrics also ran all surveys through a duplicate check and a time check to ensure all participants took enough time to read the questions and answer them honestly, to provide realistic results.

As individuals do not only hold the title trainer within an organization, the survey needed to reach individuals who might acknowledge another title within the organization but still conduct training within the organization. The trainers came from various organizations, reporting their title positions as manager, human resources, and trainer, making up 91.85% of the survey population. The rest of the participants indicated that they were either in a supervisory role or other role within an organization that still conducted training sessions.

The participants compose of a true sample because they indicated that they are part of nine different organizational departments, with the most participants indicating Human Resources, IT/Cyber Security, and Accounting/Auditing/Purchasing totaling 66.43% of the population. No participates could complete the survey if they indicated they did "No Training" in the past year. Most participants reported having 1 year to 3 years (23.29%), 3 years to 8 years (32.88%), and 8 years to 14 years (21.92%) experience conducting training sessions (totaling 78.09% of the population). For those participants, training sessions conducted per year was as expected, with most participants indicating they conducted 10 sessions (35.62%), up to 20 sessions (21.92%), up to 30 sessions (19.86%), and trailing off from there (40 = 10.96%, 50 = 6.16%, 60 = 2.74%, and more than 60 sessions = 2.74%). These percentages still represent a significant number of training sessions conducted per year among the participants, indicating that the survey results reflect current training standards within business organizations.

Other significant qualification information included educational attainment, 51.37% holding a bachelor's degree and 41.78% holding a Master's/MBA degree. Age was skewed toward a younger demographic, with 36.3% between 20-35 years old and 37.67% between 36-45 years old. This could be skewed by the data collection methodology, because most Qualtrics users take the survey on their smartphone/device and are willing to participate in research as they are paid participants.

Descriptive Statistics

The following descriptive statistics show the statistical means of the raw data collected for the research questions. The addition of skewness was added to show the deviation from a normal bell curve. The full breakdown of the data for each question and further descriptive statistical charts can be found in Appendix D. Table 1 shows the statistical means for each of the survey questions addressing the research problem and hypotheses. Because frequency was used with 1 indicating no consideration was given

(the least often) and 5 indicating that full consideration was given (most often), the statistical means represent an average of the reported data. The higher the sum and mean, the more likely it was that consideration was given. Skewness also shows which side the statistical mean shifts, also indicating that more or less likely there was an occurrence.

Table 1

Descriptive Statistics

Descriptive Statistics										
							_	Skew	ness	
	N	Min.	Max.	Sum	Mean	SD	Variance	Statistic	SE	
Q1	146	1	5	315	2.16	.980	.961	.613	.201	
Q2	146	1	5	343	2.35	1.124	1.263	.634	.201	
Q3	146	1	5	326	2.23	.969	.938	.485	.201	
Q4	146	1	5	304	2.08	1.014	1.028	.800	.201	
Q5	146	1	5	308	2.11	.831	.691	.448	.201	
Q6	146	1	5	328	2.25	1.000	1.001	.534	.201	
Q7	146	1	4	331	2.27	.942	.887	.194	.201	
Q8	146	1	4	317	2.17	.920	.846	.191	.201	
Q9	146	1	5	310	2.12	.982	.964	.547	.201	
Q10	146	1	5	328	2.25	.965	.932	.372	.201	
Q11	146	1	5	349	2.39	.964	.929	.269	.201	
Q12	146	1	5	298	2.04	.878	.771	.602	.201	
Q13	146	1	5	308	2.11	.962	.926	.767	.201	
Q14	146	1	4	310	2.12	.838	.702	.334	.201	
Q15	146	1	5	310	2.12	.996	.992	.854	.201	
Q16	146	1	5	368	2.52	1.205	1.451	.491	.201	
Q17	146	1	5	312	2.14	.914	.836	.547	.201	
Q18	146	1	5	349	2.39	1.013	1.026	.445	.201	
Valid N	146									
(listwise)										

When broken down into the three question groupings of questions 1-6, 7-12, and 13-18, questions 2, 11, and 16 indicated the highest comparative statistical means. Although questions 4, 12, and 16 have the most skewness, or variation from the traditional bell curve. Because the question groupings show much variation between the questions, analysis indicates that it is unlikely that statistical correlation exists.

Pearson Correlation

The following data analysis was conducted using SPSS Version 25 with the raw data collected from Qualtrics. The data has been grouped into three sections, based on the questions that focus on the three research questions from the study. As shown in the

Figures 2-4 in Chapter 3 of the research design, 6 survey questions were utilized to test each research question. The groupings consist of questions 1 through 6, 7 through 12, and 13 through 18. To demonstrate the relationship between each grouping of six questions, a Pearson Correlation was run to determine the strength of association of each of the questions. The value of zero indicates no association, while 1 indicates complete association. The values of .2-.39 are considered weak; 0.4-0.59 moderate; 0.6-0.79 strong; and 0.8-1 as very strong.

Table 2

Pearson Correlation for Group 1

	Bayes Factor	Inference on 1	Pairwise Co	orrelations	a		
		Q1	Q2	Q3	Q4	Q5	Q6
Q1	Pearson Correlation	1	.350	.252	.445	.410	.305
	Bayes Factor		.012	.129	.000	.002	.040
	N	146	146	146	146	146	146
Q2	Pearson Correlation	.350	1	.469	.344	.416	.604
	Bayes Factor	.012		.000	.014	.001	.000
	N	146	146	146	146	146	146
Q3	Pearson Correlation	.252	.469	1	.395	.465	.567
	Bayes Factor	.129	.000		.003	.000	.000
	N	146	146	146	146	146	146
Q4	Pearson Correlation	.445	.344	.395	1	.357	.408
	Bayes Factor	.000	.014	.003		.010	.002
	N	146	146	146	146	146	146
Q5	Pearson Correlation	.410	.416	.465	.357	1	.456
	Bayes Factor	.002	.001	.000	.010		.000
	N	146	146	146	146	146	146
Q6	Pearson Correlation	.305	.604	.567	.408	.456	1
	Bayes Factor	.040	.000	.000	.002	.000	

		 		-					
	Ν		146		146	146	146	146	146

Note. a. Bayes factor: Null versus alternative hypothesis.

Table 2 shows mostly weak to moderate positive correlation between the participant answers in each section. The significance of such results can be interpreted as participants did in fact answer similarly in the section questions. The highest correlation was between question 2 and question 6 at .604 for the 146 participants.

Similar to Table 2, Table 3 has mostly weak to moderate correlation between the participant answers in each section. The significance of such results can be interpreted as participants did in fact answer similarly in the section questions. The highest correlation in this section was 0.560 for questions 8 and questions 12 for the 146 participants.

Table 3 is similar to Tables 1 and 2, shows mostly weak to moderate positive correlation between the participant answers for each question. The addition of reporting the Bayes factor was to show the likelihood of the data given the hypothesis (Beard, Dienes, Muirhead, & West, 2016). Within Table 4, the Bayes factor does reach 1.322 which indicates that there is anecdotal evidence for Hypothesis 1. The significance of such results can be interpreted as participants answering similarly in the section questions and the likelihood that the there is some evidence that the questions indicate the likelihood of the hypothesis to be true. Tables 5 and 6 demonstrates the *t*-test, significance of that test, correlation direction, and collinearity statistics to show the strength of each comparison.

Table 2

	Bayes Factor Inference on Pairwise Correlations ^a									
		Q7	Q8	Q9	Q10	Q11	Q12			
Q7	Pearson Correlation	1	.258	.297	.522	.393	.204			
	Bayes Factor		.119	.049	.000	.003	.316			
	Ν	146	146	146	146	146	146			
Q8	Pearson Correlation	.258	1	.340	.233	.235	.560			
	Bayes Factor	.119		.016	.192	.185	.000			
	Ν	146	146	146	146	146	146			
Q9	Pearson Correlation	.297	.340	1	.332	.403	.322			
	Bayes Factor	.049	.016		.020	.002	.027			
_	N	146	146	146	146	146	146			
Q10	Pearson Correlation	.522	.233	.332	1	.389	.203			
	Bayes Factor	.000	.192	.020		.004	.319			
_	N	146	146	146	146	146	146			
Q11	Pearson Correlation	.393	.235	.403	.389	1	.440			
	Bayes Factor	.003	.185	.002	.004		.001			
_	Ν	146	146	146	146	146	146			
Q12	Pearson Correlation	.204	.560	.322	.203	.440	1			
	Bayes Factor	.316	.000	.027	.319	.001				
	N	146	146	146	146	146	146			

Pearson Correlation for Group 2

Note. a. Bayes factor: Null versus alternative hypothesis.

Table 3

	Bayes Factor Inference on Pairwise Correlations ^a									
		Q13	Q14	Q15	Q16	Q17	Q18			
Q13	Pearson Correlation	1	.225	.335	.287	.414	.303			
	Bayes Factor		.213	.019	.062	.002	.043			
	Ν	146	146	146	146	146	146			
Q14	Pearson Correlation	.225	1	.448	.474	.392	.038			
	Bayes Factor	.213		.000	.000	.003	1.322			
	Ν	146	146	146	146	146	146			
Q15	Pearson Correlation	.335	.448	1	.285	.271	.218			
	Bayes Factor	.019	.000		.065	.088	.238			
	Ν	146	146	146	146	146	146			
Q16	Pearson Correlation	.287	.474	.285	1	.420	.051			
	Bayes Factor	.062	.000	.065		.001	1.268			
	Ν	146	146	146	146	146	146			
Q17	Pearson Correlation	.414	.392	.271	.420	1	.034			
	Bayes Factor	.002	.003	.088	.001		1.334			
	Ν	146	146	146	146	146	146			
Q18	Pearson Correlation	.303	.038	.218	.051	.034	1			
	Bayes Factor	.043	1.322	.238	1.268	1.334				
	N	146	146	146	146	146	146			

Pearson Correlation for Group 3

Note. a. Bayes factor: Null versus alternative hypothesis.

Table 4Coefficient Variables

	Coefficients ^a												
Unstandardize		idardize ficients	Standardize d Coefficient			050/ CI for D		Correlations			Collinearity Statistics		
M	odel	В	SE	Beta	T	Sig.	Lower Bound	Upper Bound	Zero order	Partial	Part	Toleranc e	VIF
1	(Constan t)	4.695	.528		8.884	.000	3.649	5.740					
	Q1	212	.174	133	-1.216	.226	556	.133	181	107	100	.570	1.755
	Q2	052	.176	037	295	.768	400	.296	161	026	024	.425	2.355
	Q3	315	.196	195	-1.607	.110	702	.073	222	141	132	.461	2.169
	Q4	077	.173	050	443	.659	418	.265	130	039	036	.541	1.849
	Q5	082	.206	044	398	.691	490	.326	132	035	033	.565	1.771
	Q6	.417	.198	.267	2.103	.037	.025	.809	052	.183	.173	.421	2.373
	Q7	205	.187	132	-1.093	.276	575	.166	192	097	090	.461	2.168
	Q8	.011	.200	.007	.057	.955	384	.407	130	.005	.005	.495	2.020
	Q9	145	.138	112	-1.054	.294	418	.128	148	093	087	.600	1.666
	Q10	.134	.185	.085	.722	.472	233	.501	066	.064	.059	.487	2.055
	Q11	.013	.199	.007	.065	.949	381	.407	126	.006	.005	.595	1.680
	Q12	.060	.162	.037	.373	.710	260	.380	022	.033	.031	.684	1.462
	Q13	294	.201	165	-1.458	.147	693	.105	181	128	120	.530	1.888
	Q14	.264	.187	.163	1.412	.160	106	.633	069	.124	.116	.511	1.955
	Q15	131	.168	081	778	.438	464	.202	186	069	064	.629	1.591
	Q16	.064	.195	.040	.329	.743	322	.451	062	.029	.027	.451	2.218
	Q17	.273	.204	.161	1.336	.184	131	.677	107	.118	.110	.469	2.131
	Q18	264	.190	159	-1.385	.169	641	.113	123	122	114	.515	1.941

Note. a. Dependent Variable: Number of training sessions/year have been conducting

across the board, any type of content, with any group or position level, and with any

training methodology with intent to change training?

Table 6

Regression Analysis

	Model Summary										
				Std. Error of	rror of Change Statistics						
		R	Adjusted R	the	R Square	F			Sig. F		
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change		
1	.373ª	.139	.017	1.550	.139	1.140	18	127	.322		

When the *p*-value of an observed effect is less than the significance level, the researcher may conclude that the effect reflects the characteristics of the whole population. Based on this statistical test with p = .322, the research could then reject the null hypotheses. The ANOVA analysis using the number of training sessions/year that have been conducted against the survey questions indicating an F score which indicates the variations between sample means. Since the F-score is close to 1, the two quantities are roughly equal under the null hypothesis.

Table 7

ANOVA	Statistical	Analysis
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	ANOVA ^a									
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	49.301	18	2.739	1.140	.322 ^b				
	Residual	305.192	127	2.403						
	Total	354.493	145							

Note. a. Dependent Variable: 8. Number of training sessions/year have been conducting across the board, any type of content, with any group or position level, and with any training methodology with intent to change training? b. Predictors: (Constant), Q1 through Q16

Summary

All data collected was intended to answer if a correlation existed between the variables in the research questions. The design of the *Trainers Development of Self-Efficacy Survey* was to get raw data that could be analyzed using statistical tests provided

in this chapter. The findings, according to the dataset collected suggests that there is a positive correlation between the dependent variables and the independent variables of the survey questions, and the variables analyzed in the three hypotheses.

Research Question 1 was "What, if any, is the significance of organizational training professionals' intent on making changes to training programs in the development of self-efficacy in generationally different employees?" Based on the results, the null hypothesis was rejected. Therefore, there is an increased impact on the development of self-efficacy in generationally different employees from different organization trainers' intent to make changes to the training programs.

Research Question 2 was "What, if any, is the significance of organizational training professionals' intent on making changes to use different training methodologies on the development of self-efficacy in different employees?" The null hypothesis was not rejected, meaning there is no significant intent by trainers to make changes in the different training methodologies they use in the development of self-efficacy in different employees.

Finally, Research Question 3 was "What, if any, is the significance of organizational training professionals' intent on making changes to training programs based on the development of self-efficacy in employees at different position levels of the organization?" The null hypothesis was also not rejected, meaning there is no significance of intent to make changes by organizational trainers based on the level of employees regarding the development of self-efficacy.

These findings based on the data and statistical analysis is further explained in the Analysis and Conclusion of Chapter 5. The researcher will also discuss limitations and strengths of the study while providing additional recommendations for future research on these topics. Lastly, the researcher will provide insight into the positive social change impact of the research to make suggestions for business, trainers, employees and academic institutions on how to improve training so self-efficacy is part of every training and for the trainer to have intent to achieve a successful training session all of the time. Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

This study addressed whether professional trainers change their training programs based on generational needs, employees' position levels, or training methodology to increase self-efficacy in employees. The purpose of this quantitative cross-sectional correlational study was to determine whether there is a correlation between organizational training professionals' intent to make changes to training programs and if self-efficacy development is considered in generationally different individuals at different position levels within an organization. Hypotheses were tested by creating the Trainers Development of Self-Efficacy Survey for this study. Because organizational trainers are globally diversified in business, establishing a correlation study to demonstrate the relationship between variables, using a Likert-type survey question scale provided a range of values to analyze. These variables consisted of the number of trainings conducted each year, age of the trainer, position and department in the organization, and the level of employees trained using various types of training methodology.

The survey used Likert-type questions based on the percentage of time the trainer made changes to their training to target the specific groups of employees that the training was designed. The following information is the researcher's interpretation of the data analyzed to address the research questions.

Interpretation of Findings

Building on Bandra's framework of self-efficacy: based on personal, behavioral, and environmental factors, the three variables of generational needs, training methodology, and employee position were used to conduct the analysis of the data. Additionally, the literature review provided support regarding the personal impact in the development of self-efficacy from training, behavioral impact on training for selfefficacy development, and the environmental impact on training for self-efficacy development. These three areas reflect Bandura's factors that influence the development of self-efficacy.

Many businesses are not prepared for generational shifts, so they are not training employees properly for transition (Sprinkle & Urick, 2018). The barriers created from generational differences and the perceived generational training needs. Focus is placed on employee interaction as opposed to trainer/trainee relationships. But generational identity among trainers influences how they determine the effectiveness of others who may or may not identify similarly based on age or experience. Thus, it is important for training programs to not address stereotypes but rather individual needs.

Advanced training methods can increase the development of self-efficacy (Michels & Vanhomwegen, 2019). Additionally, more training sessions are needed to have an increased level of self-efficacy in the skills and knowledge the employee is trying to attain. If trainers anticipate that training is not just a one-time administration, they may attempt to deliver a more comprehensive program over a longer period. Contrary to the findings of this study that show trainers are not making changes to the training programs based on feedback, changes would likely be made in this case. However, lack of flexibility or rigidity of training should be addressed in future studies to determine if efficacy needs can still develop in individuals. For this to happen, individuals must adapt to the training as opposed to the training adapting to the individual.

Computational thinking of employees is one example of individuals' adaptation to training in the development of self-efficacy (Kukul & Karatas, 2019). Individuals who can achieve a level of computational thinking are more likely to be successful in their development. Tools that measure computational thinking provide feedback to the trainer regarding whether achievement occurs. However, trainers report that even when feedback is provided they are not adjusting their training programs. The tool can then only be used to measure the success rate of the learner but, not the effectiveness of the training program itself. Though a successful training program indicates a higher number of learners, the missing variable is the effectiveness of the content being applied to the job in the future.

Training to Position Needs

Currently, most leadership training is considered ineffective and is cost inefficient for organizations (Lacerenza, Reyes, Marlow, Salas, & Joseph, 2017). Researchers had analyzed leadership training programs from the employee side, suggesting that needs analysis, feedback, multiple delivery methods, spaced training sessions, an on-site location, and face-to-face delivery that is not self-administered are more effective programs (Lacerenza et al., 2017). The only factor this does not account for is whether the trainer is considering these issues to be effective and if the company is willing to pay for customized or personalized training programs. Based on the results of this study, only 59.59% are considering conducting different training programs to employees of different organizational positions most or all the time. This leaves 40% of training programs that are not or only some of the time being changed based on position level by the trainer.

Capacity to Learn from Training

Acceptance of learning is difficult to determine because individuals are motivated by different knowledge needs. A company may require that a new software be learned because the integrated technology is implemented within the company. However, the need versus desire may create different motivation, though employees' desire to keep their job will also create more motivation to learn. The trainer is tasked with different individuals' motivations to learn the material at all different levels of capacity, as well as all different levels of task needs to accomplish the goals of a company. Trainers then directly impact the capacity of individuals to learn the development of self-efficacy.

Group Dynamics

The training environment is a variable that can consist of a combination of variables including the classroom, the office, the computer, at home, or even during a commute through e-learning and mobile access learning environments. Interaction with others in the training environment and with the instructor or trainer of the group can constitute communication issues and perspective differences not entailed in this research. The main dynamic is that the instructor is altering the training environment so that all employees develop a level of self-efficacy and additional or further training is no longer needed.

Employees achieving a sense of self-efficacy from a training session will take on future challenging training with a deeper interest in mastering the content. Trying to define who falls into each category is the challenge for the trainer and is a suggestion for future research. Those who face a challenge and lack self-efficacy lose confidence quicker and do everything they can to avoid the job or training. If trainers are aware of this avoidance, they can make extra effort to assure that behavior, emotions, and the environment is conducive of developing self-efficacy.

Much research of self-efficacy development, is conducted on the trainee's side, observing whether efficacy is developed, or goals are achieved. Thus, the leading perspective is to question how to develop self-efficacy without being trained to develop self-efficacy. Additionally, only focusing on a single variable such as teaching strategy or methodology does not account for all contributing variables in the development of efficacy (Michels & Vanhomwegen, 2019). Therefore, the question is whether it is the trainer's intent to develop efficacy from the training and whether efficacy development is being considered before or during the training to ensure an increase of self-efficacy development.

Trainer Intent

When a trainer is tasked with improving organizational knowledge, the intent of the trainer would be to develops a successful training program. Though, being completely successful in creating efficacy in employees would mean trainers are not needed after the initial training, however, innovation and technology continuously generates the need for future trainings. Training employees increases innovation in the workplace (Dostie, 2018). However, the results of the data collected from this research showed that 30% of respondents are not making changes to their training programs based on feedback on effectiveness to development self-efficacy. Research has suggested that the trainer's intent is to act ethically in providing enough training so that the company achieves enhanced knowledge, as well as stronger business relationships that can generate new revenue streams from future training programs (Cabler, 2018). But the findings of this study suggest that the intent may not be completely genuine for the trainer to succeed with the training programs. However, the findings also indicated that the training may not align consistently with the development of self-efficacy.

Contemplation and Consideration

The concept of consideration refers to whether trainers are making conscious thought about the end results of the training outcome. The desired outcome of knowledge transferred from the trainer to the trainee is the set goal; however, contemplation may not be made as to whether the outcome is sufficient for each employee to be successful in their specific task. The focus instead may be on whether the trainer was successful in transferring knowledge.

As knowledge management tools are increasingly utilized by organizations to enhance innovation potential and absorptive capacity, employees will be forced to use these tools (Gressgard, Amundsen, Aasen, & Hansen, 2014). The issue is how to train employees on how to use these innovations to achieve the organizational goals. The trainers must then contemplate how to consider the variables needed that contribute to a successful training session. Such variables discussed in this research involve the generational differences of employees, the methodology of training delivery, and the organizational position of employees regarding context, not necessarily content.

Content Applicable to Goals of the Company

Training content is often discussed as a main issue regarding the development of self-efficacy. Content topics like mathematics demonstrate that exposure, connection with the task, and self-reported resistance perceptions all can hinder the development of efficacy in the learner (Borgonovi & Pokropek, 2019). In business, content specific training is often utilized for specific individuals, making it ineffective to those who do not need the information to complete their job. A trainer would therefore not identify specialized content with a generalized training program, because that training would not apply to all levels and positions within an organization. Additionally, programs for a new software or business process, as opposed to forced training, are distinct in that the content

is not focused to a specific individual but everyone in the company who may need to access that software or use the technology.

The main theoretical concept of this study involved the development of selfefficacy in employees. Providing a conducive learning environment, presenting modeling behaviors, and acknowledging personal differences are all needed for transfer of knowledge from a trainer to the trainee. An unexplored topic that could impact the effectiveness of training sessions is the content of the material used for the training. Themes, components, resources, handouts, and other pedagogical instruments used to increase the interest of material may be perceived to impact the learning process much more than other variables. If interest in the training does not exist, it is also likely that self-efficacy is not going to be developed because dedication to learning is not a priority.

Companies are trying to create agility and resilience by preparing employees to be capable to better handle rapid change under uncertainty (Braun, Hayes, DeMuth, & Taran, 2017). When employees have discretion, they are more likely to accept the training and achieve efficacy (Avgar, Tambe, & Hitt, 2018). Thus, content training that is applicable to a specific task or position, would have a greater rate of self-efficacy development because the trainer would focus on those specific individuals' needs as opposed to the company goals and expectations.

Limitations of the Study

The study presented a limitation that was not originally considered by the researcher when writing the dissertation proposal, the fact that organizational trainers do

not consider their main role as a trainer, since the duty of training employees is a secondary or tertiary responsibility for that trainer. Therefore, targeting specifically organizational trainers, created problems in easily recruiting a significant number of participants to take the survey. Expanding on the definition of who is an organizational trainer was necessary to collect enough data while maintaining validity of the population to address the research questions.

Also, a limiting factor in the research is that the individuals that did participate were from several different positions in different departments within their respective organizations such as Human Resources, IT/Cyber Security, and Accounting/Auditing/Purchasing, making up majority of the participants. Since most organizations still maintain these departments, generalizability can still be established given the distribution of survey participants for each of the seven categories established. The departmentalization of trainers within an organization could be future research providing that individuals in human resources may be more inclined or potentially trained to be organizational trainer than IT/Cyber Security specialists. Alternatively, due to the higher difficulty level of knowledge analysis needed to complete the job tasks, IT/Cyber Security may truly have more concern about developing the self-efficacy of the employee than an HR professional.

All participants completing the questionnaire, consenting to answer truthfully and with best intentions, were included in the reported raw data following the approved collection method from the Walden University IRB. Since they were selecting from Likert-type answers based on how often they performed specific tasks, not on their performance, the participants are more likely to answer truthfully. Qualtrics also screens all participants in their database for credibility and standards were set that a participant could not answer the questions to fast, indicating that they did not actually read and consider the options before answering. Given these standards, participants were still able to take the survey in under 10 minutes since the questions were not taxing to answer for the participant.

The data was analyzed using SPSS version 25 and conformed to all standard statistical analysis procedures. No biases were made on the data by the researcher as reported in Chapter 4. While participants answers were self-reflective on previous performance, reflection would not create any biased answers since time (how often) was the determining factor, not why. The last factor is dependability in which another researcher could replicate this study using the *Trainers Development of Self-Efficacy Survey* created for this research study by the researcher.

Recommendations

Further research should involve a greater understanding of how trainers' approach and develop training programs with the goal in mind of achieving self-efficacy for the employees participating in the training. Comparatively, exploring the trainers' intent and consideration of the value of self-efficacy development as part of the training would be an extension of this research. As getting to know what a trainer is thinking in the past, does not reflect the current position of the trainer, this line of research could be difficult to expand upon without resistance or participant bias implications. Consideration could also be given to the effectiveness of the training program regarding the content, as this could be a difficult situation to measure since the goals for various positions, levels within the organization, and expectations or responsibilities can be so varied within the organization, a standard rubric measurement would not work. Additional research could also focus from the employee perspective, determining if they truly are achieving selfefficacy from various forms of training during an established training session. The employees' perception of the trainer would be another alternative to explore since the connection between the trainer and employee is a contributing factor to successful training.

One takeaway from the limitations of this study discussed in the previous section is that the variables can be separated based on trainer identity. Since human resource managers distinguish themselves from other organizational trainers, the training progress may also be distinguishable. These differences can further be identified and can be used to improve upon the *Trainer's Development of Self-efficacy Survey* questions and targeted sample population, as well as adding the perception of the employees to validate the trainers' responses. Since time was the main limiting factor of the survey, "how often" could be broken down further to exact number of times each occurrence happened. Exact numbers, however, could be a limiting factor since most employees do not keep such an exact detailed log of everything they do from one year to the next, nor could they remember or recall what they did in the past with such detail. Since the sample size minimum determined by G*Power was 134, a concerted effort was made to collect surveys from more than the minimum number. The researcher was able to collect data from 146 participants, and although the number is not significantly larger, it should be considered enough data to reflect the research model. A suggestion for future research is for the expansion on the population and sample size which could also improve the insight into the impact of the three variables on the development of self-efficacy.

The strengths of this study sheds light on the complex organizational variables that need to be considered when conducting training for employees. Since trainers within an organization may include employees and individuals that sole responsibility is not training, these individuals may not have expertise in training or even the content itself, but are required to instruct or train others that may have even more restrictions on learning or acceptance to learn new material. These issues are complicated by the variations of potential employees and variations of trainers that all have different preferences for learning style, topic focus, and expectation of acceptable achievement level of learning.

Implications

As the researcher's purpose of this study is to provide a correlation between the theory of self-efficacy and several variables, no causation can be determined from the data. Analysis indicates that organizational trainers consider aspects of self-efficacy while conducting training sessions, however, the extent to which they value the concept

in achieving a successful training session is clearly not top priority. Trainers therefore are not focused on trying to achieve 100% knowledge transfer of information from the trainer to the employee and are not adjusting their training programs, methodology, or training styles to accommodate such results. Two resulting assumptions can be implied from the lack of prioritization of self-efficacy: 1. 100% knowledge transfer is not perceived to be possible in the learning environment, or 2. the trainer is determining that 100% transfer is not necessary for the employee to be successful in their position based on the training. Based on the second assumption, a percentage level of self-efficacy would be considered acceptable since the company goals of the training would be achieved. Further research is suggested to determine what is considered an accepted amount of knowledge for self-efficacy to be considered achieved, as opposed to consideration of mastery of knowledge of that content or skill to achieve the organizational goal.

These implications from the research suggest that further research is needed to determine the degree or level of acceptability trainers would accept as to how much knowledge transfer would be acceptable for the specific goals of the training. Categorization of training already exist, such as beginner or advanced training, but these classifications are generalized to the level of content that the trainee will be exposed to instead of the specified level of knowledge that will be achieved from the training. The difference between advanced training and beginner training does not indicate what the employee may need to complete their specific job duties or future projects. A recommendation for trainers is to avoid classification of training as such and provide specific measurables that an employee would be able to achieve as the classification system.

Based on the need for retraining when self-efficacy is not achieved, if trainers are not focusing on trying to achieve a higher level of self-efficacy in the training session, more training will be needed. Financially, companies are trying to limit training to only what is necessary, however, the desired level of training must be determined based on a combination of what knowledge needs to be learned and what knowledge is necessary to accomplish the desired outcome. Regardless of financial constraints, companies should acknowledge that organizational training may not be optimal coming from an internal trainer who does not have the expertise in the subject matter or training on how to optimize knowledge transfer to employees. Additionally, hiring external organizational consultants to conduct the training should also be vetted to make sure the trainer can provide agility and flexibility in the customization of the training being provided to the needs of the organization and specifically to the needs of the individual employees not known to the external trainer. The researcher cannot provide a simplified solution to businesses; however, these two questions should be asked when deciding on which training program would be best suited to fit the organizational needs.

Conceptual changes to the training practices and "training the trainer" to consider self-efficacy in the practice of training employees to achieve organizational goals would shape how training programs are designed in the future. The need for flexibility within the training would be a significant change from the rigid training programs that currently exist and that are implemented when organizations institute new practices and procedures. The overall impact to society in the design, delivery modality, and intention of the trainer to positive social change is needed to address the practice of developing self-efficacy in employees.

Conclusions

Following Bandura's foundational concept of self-efficacy theory, the research provided addresses the situation as the trainers' ability to manipulate the training environment to improve upon the process of knowledge transfer to employees to a perceived significant level at which the employee is perceived to have developed selfefficacy. If the trainer believes that the trainee has accomplished the perceived level, then further training would be determined as not necessary. Alternatively, if the perception is that the employee has not developed a significant level of efficacy, or that the employee, him or herself, that employee would identify as needing more training. Since only trainer's perception were questioned, employee disclosure could not be calculated or studied. Therefore, the perception made by the trainer of their own program is based the perception of how well the trainers performed in those sections of training. When trainers address the variable needs of the employees purposefully and with intent, they will have a greater impact on the development of those learners. The key is whether these trainers are assessing the development in the training sessions based on the variables presented by the employee participants. Based on the findings from this

research, the researcher can show that self-efficacy development is not being considered in every training session for employees, which would indicate that knowledge transfer is not be optimized in all sessions.

As future research expands on these research findings, it is the researchers hope that businesses and educational institutions can gain insight into how to improve the training experience as to create an increase in self-efficacy awareness. The secondary benefit is that training will then have a new focus on efficient and effective knowledge transfer within an organization, allowing individuals to get the specialize training needed to meet the desires of their specific position and tasks within the company. As trainers expand upon and distinguish the variables that impact the development of self-efficacy in employees, the concepts can be expanded to all aspect of organizational training and further expand the self-efficacy theory.

References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60, 451-474. doi:10.1146/annurev.psych.60.110707.163505
- Alutu, A. G. (2007). Guidance and counseling services in federal government colleges in Nigeria. *Nigerian Journal of Guidance and Counselling*, 8(1), 44-49.
 doi:10.4314/njgc.v8i1.36962
- Amin, H. J., Aziz, K., Halamek, L. P., & Beran, T. N. (2013). Simulation-based learning combined with debriefing: trainers' satisfaction with a new approach to training the trainers to teach neonatal resuscitation. *BMC Research Notes*, *6*(1), 1-5. doi:10.1186/1756-0500-6-251
- Appelbaum, S. H., Degbe, M. C., MacDonald, O., Nguyen-Quang, T. S. (2015).
 Organizational outcomes of leadership style and resistance to change (Part Two),
 Industrial and Commercial Training, 47(2), 73-80. doi:10.1108/ICT-07-2013-0045
- Aramo-Immonen, H., Koskinen, K. U., & Porkka, P. L. (2011). The significance of formal training in project-based companies. *International Journal of Managing Projects in Business*, 4(2), 257-273. doi:10.1108.17538371111120234
- Avgar, A., Tambe, P., & Hitt, L. M. (2018). Built to learn: How work practices affect employee learning during healthcare information technology implementation. *MIS Quarterly*, 42(2), 645–659. doi:10.25300/MISQ/2018/13668

- Awais Bhatti, M., Ali, S., Mohd Isa, M. F., & Mohamed Battour, M. (2014). Training transfer and transfer motivation: The influence of individual, environmental, situational, training design, and affective reaction factors. *Performance Improvement Quarterly*, 27(1), 51-82. doi:10.1002/piq.21165
- Azouzi, M. A., & Jarboui, A. (2013). CEO emotional intelligence and board of directors' efficacy. *Corporate Governance*, *13*(4), 365-383. doi:10.1108/CG-10-2011-0081
- Babbie, E. (1990). The essential wisdom of sociology. *Teaching Sociology*, *18*, 526-540. doi:10.2307/1317643
- Balogun, A. G., & Olanrewaju, A. S. (2016). Role of computer self-efficacy and gender in computer-based test anxiety among undergraduates in Nigeria. *Psychological Thought*, 9(1), 58. doi:10.5964/psyct.v9i1.160
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review.* 84(2), 191–215. doi:10.1037/0033-295x.84.2.191
- Bandura, A. (1988). Self-efficacy conception of anxiety. *Anxiety Research*, *1*(2), 77-98. doi:10.1080/10615808808248222
- Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50, 248-287. Retrieved from http://www.journals.elsevier.com/organizational-behavior-and-human-decisionprocesses
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*, 1-26. doi:10.1146/aanurev.psych.52.1.1

- Barbu, E., & Song, X. (2016). The effects of offshoring on employer-provided training. *The Journal of International Trade & Economic Development*, 25(4), 479-503, doi:10.1080/09638199.2015.1068838
- Bausch, S., Michel, A., & Sonntag, K. (2014). How gender influences the effect of age on self□efficacy and training success. *International Journal of Training and Development, 18*(3), 171–187. doi: 10.1111/ijtd.12027
- Bates, R., Holton, E. F., III, & Hatala, J. P. (2012). A revised learning transfer system inventory: Factorial replication and validation. *Human Resource Development International*, 15(5), 549-569. doi:10.1080/13678868.2012.726872
- Beard, E., Dienes, Z., Muirhead, C., & West, R. (2016). Using Bayes factors for testing hypotheses about intervention effectiveness in addictions research. *Addiction*, 111: 2230–2247. doi: 10.1111/add.13501
- Beck, M. R., Martin, B.A., Smitherman, E., & Gaschen, L. (2013). Eyes-on training and radiological expertise: An examination of expertise development and its effects on visual working memory. *Human Factors*, 55(4), 747-763. doi:10.1177/0018720812469224
- Bhatti, M. A., & Kaur, S. (2010). The role of individual and training design factors on training transfer. *Journal of European Industrial Training*, 34(7), 656-672.
 doi:10.1108/03090591011070770
- Bloor, M., Sampson, H., & Gekara, V. (2014). Global governance of training standards in an outsourced labor force: The training double bind in seafarer license and

certification assessments. Regulation & Governance, 4, 455.

doi:10.1111/rego.12042

- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Michels, N., Kabadayi, S., Gruber, T.,
 Loureiro, Y. K., & Solnet, D. (2013). Understanding generation Y and their use of social media: a review and research agenda. *Journal of Service Management*, 24(3), 245-267. doi:10.1108/09564231311326987
- Bordia, P., Restubog, S. L. D., Jimmieson, N. L., & Irmer, B. E. (2011). Haunted by the past: Effects of poor change management history on employee attitudes and turnover. *Group & Organization Management*, *36*(2), 191-222. doi:10.1177/1059601110392990
- Borgogni, L., Dello Russo, S., & Latham, G. P. (2011). The relationship of employee perceptions of the immediate supervisor and top management with collective efficacy. *Journal of Leadership and Organizational Studies, 18*(1), 5–13. doi:10.1177/1548051810379799
- Borgonovi, F., & Pokropek, A. (2019). Seeing is believing: Task-exposure specificity and the development of mathematics self-efficacy evaluations. *Journal of Educational Psychology*, *111*(2), 268-283. doi:10.1037/edu0000280
- Bottiroli, S., Cavallini, E., Dunlosky, J., Vecchi, T., & Hertzog, C. (2013). The importance of training strategy adaptation: A learner-oriented approach for improving older adults' memory and transfer. *Journal of Experimental Psychology Applied*, *19*(3), 205-218. doi:10.1037M0034078

- Bourg, J., Stoltzfus, W., McManus, S., & Fry, P. J. (2010). Proactive coaching for employee development and improved business results. *Total Quality Management, 21*(10), 1005-1016. doi:10.1080/14783363.2010.487705
- Braun, T. J., Hayes, B. C., DeMuth, R. L. F., & Taran, O. A. (2017). The development, validation, and practical application of an employee agility and resilience measure to facilitate organizational change. *Industrial and Organizational Psychology*, *10*(4), 703-723. doi:10.1017/iop.2017.79
- Brown, W. & May, D. (2012). Organizational change and development. *Journal of Management Development, 31*(6), 520-536. doi:10.1108/02621711211230830
- Brunetto, Y. Farr-Wharton, R., & Shacklock, K. (2012). Communication, training, wellbeing, and commitment across nurse generations. *Nursing Outlook*, 60, 7-15. doi:10.1016/j.outlook.2011.04.004
- Buckingham, M. (2012). Leadership development in the age of the algorithm. *Harvard Business Review*, 90(6), 86-94. Retrieved from http://www.hbr.org
- Bui, N. H. (2017). The relationship between self-efficacy and perceptions of different literacy types among college students. *Journal of College Reading and Learning*, 47, 45-57. doi:10.1080/10790195.2016.1218808
- Cabler, K. N. (2018). The impact of organizational development (OD) methodology on leadership training: A more intentional consulting approach. *Journal of Practical Consulting*, 6(1), 37-45. Retrieved from

https://www.regent.edu/acad/global/publications/jpc/vol6iss1/JPC_Vol6_Iss1_Ful 1_Issue.pdf

- Campbell, W. K., Campbell, S. M., Siedor, L. E., & Twenge, J. M. (2015). Generational differences are real and useful. *Industrial and Organizational Psychology*, 8(3), 324-331. doi:10.1017/iop.2015.43
- Cau-Bareille, D., Gaudart, C., & Delgoulet, C. (2012). Training, age, and technological change: Difficulties associated with age, the design of tools, and the organization of work. *Work: Journal of Prevention, Assessment & Rehabilitation, 41*, 127-141. doi:10.3233/WOR-2012-1278
- Cekada, T. L. (2012). Training a multigenerational workforce: Understanding key needs & learning styles. *Professional Safety*, 57(3), 40-44. Retrieved from http://www.onepetro.org/journal-paper/ASSE-12-03-40
- Chaudhuri, S., & Bartlett, K. R. (2014). The relationship between training outsourcing and employee commitment to the organization. *Human Resource Development International*, *17*(2), 145. doi:10.1080/13678868.2014.886444
- Chen, J. H., McQueen, R. J., & Sun, P. Y. T. (2013). Knowledge transfer and knowledge building at offshored technical support centers. *Journal of International Management*, 19, 362-276. doi:10.1016/j.intman.2013.03.009
- Cherchem, N. (2017). The relationship between organizational culture and entrepreneurial orientation in family firms: Does generational involvement

matter?. Journal of Family Business Strategy, 8, 87-98.

doi:10.1016/j.jfbs.2017.04.001

- Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics* of Education Review, 30(3), 449-465. doi:10.1016/j.econedurev.2010.12.010
- Cho, K., & MacArthur, C. (2011). Learning by reviewing. *Journal of Educational Psychology*, *103*(1), 73-85. doi:10.1037/a0021950
- Choi, M., & Ruona, W. E. A. (2011). Individual readiness for organizational change and its implications for human resource and organization development. *Human Resource Development Review, 10*(1), 46-73. doi:10.1177/1534484310384957
- Clark, J. K., Brey, R. A., & Clark, S. E. (2013). Development of a pre-service teachers' selfefficacy instrument regarding teacher health education standards. *The Journal of School Health*, 83(10), 718-727. doi:10.1111/josh.12086
- Cohen, J. (1988). *Statistical power analysis for the behavioral science*. Hillsdale, NJ: Erlbaum.
- Cohen, W. M. & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152. doi:10.2307/2393553
- Consiglio, C., Borgogni, L., Di Tecco, C., & Schaufeli, W. B. (2016) What makes employees engaged with their work? The role of self-efficacy and employee's
perceptions of social context over time. *Career Development International*, 21(2), 125-143. doi:10.1108/CDI-03-2015-0045

- Corbalan, G., Kester, L., & van Merriënboer, J. (2009). Dynamic task selection: Effects of feedback and learner control on efficiency and motivation. *Learning and Instruction*, *19*(6), 455–465. doi:10.1016/j.learninstruc.2008.07.002
- Costanza, D. P., & Finkelstein, L. M. (2015). Generationally based differences in the workplace: Is there a *there* there?. *Industrial & Organizational Psychology*, 8(3), 308-323. doi:10.1017/iop.2015.15
- Coutinho, S. S., & Neuman, G. (2008). A model of metacognition, achievement goal orientation, learning style and self-efficacy. *Learning Environments Research*, *11*(2), 131-151. doi:10.1007/s10984-008-9042-7
- Craik, F. I., & Lockhart, R. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11, 671–684. https://doi.org/10.1016/S0022-5371(72)80001-X
- Craik, F. I., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General, 104*, 268–294
- Cruz, A. M., Rincon, A. R., & Haugan, G. L. (2013). Measuring the performance of maintenance service outsourcing. *Biomedical Instrumentation & Technology / Association for the Advancement of Medical Instrumentation*, 47(6), 524-535. doi:10.2345/0899-8205-47.6.524

- Dabke, D. (2016). Impact of leader's emotional intelligence and transformational behavior on perceived leadership effectiveness: A multiple source View. *Business Perspectives & Research*, 4(1), 27-40. doi:10.1177/2278533715605433
- Dahling, J. J. (2016). Exhausted, mistreated, or indifferent? Explaining deviance from emotional display rules at work. *European Journal of Work and Organizational Psychology*, 26(2), 171-182. doi:10.1080/1359432X.2016.1229307
- Deal, J. J., Stawiski, S., Graves, L., Gentry, W. A., Weber, T. J., & Ruderman, M. (2013).
 Motivation at work: Which matters more, generation or managerial level?
 Consulting Psychology Journal: Practice & Research, 65(1), 1-16.
 doi:10.1037/a0032693
- Derksen, B. J., Duff, M. C., Weldon, K., Zhang, J., Zamba, K. D., Tranel, D., & Denburg, N. L. (2015). Older adults catch up to younger adults on a learning and memory task that involves collaborative social interaction. *Memory*, 23(4), 612-624. doi:10.1080/09658211.2014.915974
- Dobbin, F. (2013). Review of Disintegrating democracy at work: Labor unions and the future of good jobs in the service economy. *Administrative Science Quarterly*, 58(1), 152-154. doi:10.1177/0001839212472661
- Dostie, B. (2018). The impact of training on innovation. *ILR Review*, 71(1), 64–87. doi:10.1177/0019793917701116

- Dunning, D., & Holmes, J. (2014). Does working memory training promote the use of strategies on untrained working memory tasks?. *Memory & Cognition*, 42(6), 854-862. doi:10.3758/s13421-014-0410-5
- Eom, S. B. (2012). Effects of LMS, self-efficacy, and self-regulated learning on LMS effectiveness in business education. *Journal of International Education in Business*, 5(2), 129-144. doi/10.1108/18363261211281744
- Elliott, M., Dawson, R., & Edwards, J. (2009). Providing demonstrable return-oninvestment for organisational learning and training. *Journal of European Industrial Training*, 33(7), 657-670. doi:10.1108/03090590910985408
- Festing, M., & Schafer, L. (2014). Generational challenges to talent management: A framework for talent retention based on the psychological-contract perspective. *Journal of World Business, 49*, 262-271. doi:10.1016/j.jwb.2013.11.010
- Fiedler, M., & Welpe, I. (2010). How do organizations remember? The influence of organizational structure on organizational memory. *Organizational Studies*, 31(04), 381-407. doi:10.1177/0170840609347052
- Finkelstein, L. M., King, E. B., & Voyles, E. C. (2014). Age metastereotyping and crossage workplace interactions: A meta-view of age stereotypes at work. *Work, Aging, and Retirement, 1*(1), 26-40. doi:10.1093/worker/wau002
- Foldy, E. G., & Buckley, T. R. (2016). Permeable borders: How understanding conflict in research teams can enhance understanding conflict in work teams. *Leading Through Conflict*, 45-64. doi:10.1007/978-1-137-56677-5_3

- Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2015). *Research methods in the social sciences*. Macmillan Education Company, NY: Worth Publishers.
- Galanaki, E., Bourantas, D., & Papalexandris, N. (2008). A decision model for outsourcing training functions: Distinguishing between generic and firm-job-specific training content. *The International Journal of Human Resource Management*, 19(12), 2332-2351. doi:10.1080/09585190802479579
- Garavan, T. (2019). Measuring the organizational impact of training: The need for greater methodological rigor. *Human Resource Development Quarterly*, *30*(3). 291-309. doi:10.1002/hrdq.21345
- Gibson, C. B. (2001). Me and us: Differential relationships among goal-setting training, efficacy and effectiveness at the individual and team level. *Journal of Organizational Behavior*, 22(7), 789-808. doi:10.1002/job.114
- Gibson, C. B., & McDaniel, D. M. (2010). Moving beyond conventional wisdom:
 Advancements in cross-cultural theories of leadership, conflict, and
 teams. *Perspectives on Psychological Science*, 5(4), 450–
 462. doi:10.1177/1745691610375560
- Gibson, J. L. (2015). The effects of workforce trends and changes on organizational recruiting: A practical perspective. *Industrial and Organizational Psychology*, 8(3), 383-387. doi:10.1017/iop.2015.54

Gorman, C. A., & Rentsch, J. R. (2009). Evaluating frame-of-reference rater training effectiveness using performance schema accuracy. *Journal of Applied Psychology*, 94(5), 1336-1344. doi:10.1037/a0016476

Grant, A. M. (2014). The efficacy of executive coaching in times of organizational change. *Journal of Change Management*, 14(2), 258-280.
doi:10.1080/14697017.2013.805159

- Gressgard, L. J., Amundsen, O., Aasen, T. M., & Hansen, K. (2014). Use of information and communication technology to support employee-driven innovation in organizations: A knowledge management perspective. *Journal of Knowledge Management, 18*(4), 633-650. doi:10.1108/JKM-01-2014-0013
- Gunseli, E., Olivers, C. L., & Meeter, M. (2016). Task-irrelevant memories rapidly gain attentional control with learning. *Journal of Experimental Psychology. Human Perception & Performance, 42*(3), 354-362. doi:10.1037/xhp0000134
- Gursoy, D., Chi, C. G., & Karadag, E. (2013). Generational differences in work values and attitudes among frontline and service contact employees. *International Journal of Hospitality Management*, 32, 40-48. doi:10.1016/j.ijhm.2012.04.002
- Herbert, I. (2009). Business transformation through empowerment and the implications for management control systems. *Journal of Human Resource Costing & Accounting*, 13(3), 221-244. doi:10.1108/14013380910995511

Hillman, D. R. (2014). Understanding multigenerational work-value conflict resolution. *Journal of Workplace Behavioral Health*, 29(3), 240-257.
doi:10.1080/15555240.2014.933961

Ho, A. D. D., Arendt, S., Zheng, T., & Hanisch, K. A. (2016). Exploration of hotel managers' training evaluation practices and perceptions utilizing Kirkpatrick's and Philips's models. *Journal of Human Resources in Hospitality & Tourism*, *15*(2), 184-208. doi:10.1080/15332845.2016.1084861

- Hollenbeck, J. R., & Brief, A. P. (1987). The effects of individual differences and goal origin on goal setting and performance. *Organizational Behavior and Human Decision Processes*, 40, 392-414. doi:10.1016/0749-5978(87)90023-9
- Holton, E. F., Bates, R. A., & Ruona, W. E. A. (2000). Development and validation of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4). 333–360. Retrieved from

http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1532-1096

Howardson, G. N., & Behrend, T. S. (2015). The relative importance of specific selfefficacy sources in pretraining self-efficacy beliefs. *International Journal of Training and Development*, 19(4), 233-252. doi:10.1111/ijtd.12060

Hsia, J. W., Chang, C.-C., & Tseng, A. H. (2014). Effects of individuals' locus of control and computer self-efficacy on their e-learning acceptance in high-tech companies. *Behavior & Information Technology*, *33*(1), 51-64. doi:10.1080/0144929X.2012.702284

- Jia, D., Bhatti, A., & Nahavandi, S. (2014). The impact of self-efficacy and perceived system efficacy on effectiveness of virtual training systems. *Behaviour & Information Technology*, 33(1), 16-35. doi:10.1080/0144929X.2012.681067
- Jiang, Z. (2014). Emotional intelligence and career decision-making self-efficacy: National and gender differences. *Journal of Employment Counseling*, 51(3), 112-124. doi:10.1002/j.2161-1920.2014.00046.x
- Jiang, Z. (2016). Emotional intelligence and career decision-making self-efficacy: Mediating roles of goal commitment and professional commitment. *Journal of Employment Counseling*, 53(1), 30-47. doi:10.1002/joec.12026
- Johnston, V., Strong, J., Gargett, S., Jull, G., & Ellis, N. (2014). Enhancing the vocational outcomes of people with chronic disabilities caused by a musculoskeletal condition: Development and evaluation of content of self-management training modules. *Work*, 49(3), 455-464. doi:10.3233/WOR-131722
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: the role of core evaluation. *Journal of Applied Psychology*, 83(1), 17-34. doi:10.1037/0022-3514.54.5.853
- Kaifi, B. A., Nafei, W. A., Khanfar, N. M., & Kaifi, M. M. (2012). A multi-generational workforce: managing and understanding millennials. *International Journal of Business and Management*, 7(24), 88. doi:10.5539/ijbm.v7n24p88
- Keller, T., & Weiber, J. (2015). What it takes and costs to be an ambidextrous manager: Linking leadership and cognitive strain to balancing exploration and exploitation.

Journal of Leadership & Organizational Studies, 22(1), 54-71.

doi:10.1177/1548051814524598

- Kilkelly, E. (2011). Using training and development to recover failing projects. *Human Resource Management International Digest, 19*(4), 3-6. doi:10.1108/0967073111140649
- Kim, S., Kim, M., Han, H., & Holland, S. (2016). The determinants of hospitality employees' pro-environmental behaviors: The moderating role of generational differences. *International Journal of Hospitality Management, 52,* 56-67. doi:10.1016/j.ijhm.2015.09.013
- King, C., Murillo, E., & Lee, H. (2017). The effects of generational work values on employee brand attitude and behavior: A multi-group analysis. *International Journal of Hospitality Management, 66*, 92-105. doi:10.1016/j.ijhm.2017.07.006
- Kitching, J., Cassidy, S., Eachus, P., & Hogg, P. (2011). Creating and validating self-efficacy scales for students. *Radiologic Technology*, 83(1), 10-19. Retrieved from http://www.radiologictechnology.org/
- Kivilghan, D. J., & Kivilghan, D. I. (2009). Training related changes in the ways that group trainees structure their knowledge of group counseling leader interventions. *Group Dynamics: Theory, Research, and Practice, 13*(3), 190-204. https://doi.org/10.1037/a0015357

- Klein, H. J., Wesson, M. J., Hollenbeck, J. R., & Alge, B. J. (1999). Goal commitment and the goal-setting process: Conceptual clarification and empirical synthesis. *Journal of Applied Psychology*, 84(6), 885-896. doi:10.1037/0021-9010.84.6.885
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193–212. doi:10.5465/amle.2005.17268566
- Kolb, A. Y., & Kolb, D. A. (2008). The learning way: Meta-cognitive aspects of experiential learning. *Simulation & Gaming*, 40(3), 297–327. doi:10.1177/1046878108325713
- Kok-Yee, N., Soon, A., & Kim-Yin, C. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, job demands, and job autonomy. *Journal of Applied Psychology*, *93*(4), 733-743. doi:10.1037/0021-9010.93.4.733
- Kraiger, K. (2007). Training. In S. Rogelberg (Ed.), *Encyclopedia of industrial and organizational psychology*, (pp. 820-821). Thousand Oaks, CA: Sage. doi:10.4135/9781412952651.n315
- Kulviwat, S., Bruner, G. C., II, & Neelankavil, J. P. (2014). Self-efficacy as an antecedent of cognition and affect in technology acceptance. *Journal of Consumer Marketing*, *31*(3), 190-199. doi:10.1108/JCM-10-2013-0727

- Kukul, V., & Karatas, S. (2019). Computational thinking self-efficacy scale:
 Development, validity and reliability. *Informatics in Education*, 18(1), 151–164.
 Retrieved from https://www.mii.lt/informatics_in_education/aiindex.htm#K
- Kumar, A., Bhatia, S., & Chiang, I. J. (2013). Deployment of an in-house designed training process in a quaternary care hospital. *Technology and Health Care, 21*, 469-478. doi:10.3233/THC-130750
- Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Salas, E., & Joseph, D. L. (2017).
 Leadership training design, delivery, and implementation: A meta-analysis.
 Journal of Applied Psychology, *102*(12), 1686-1728. doi:10.1037/ap10000241
- Laker, D. R., & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human Resource Development Quarterly*, 22(1), 111-122. doi:10.1002/hrdq.20063
- Lakshminarayanan, S., Pai, Y. P., & Ramaprasad, B. S. (2016). Competency need assessment: a gap analytic approach. *Industrial and Commercial Training*, 48(8), 423-430. doi:10.1108/ICT-04-2016-0025
- Lambert, T. E. (2016). Do efficiency and productivity pay off for capital and labor?. *World Review of Political Economy*, 7(4), 474-485.
 doi:10.13169/worlrevipoliecon.7.4.0474
- Larsen, M. M., Manning, S., & Pedersen, T. (2013). Uncovering the hidden costs of offshoring. The interplay of complexity, organizational design, and experience. *Strategic Management Journal*, 34, 533-552. doi:10.1002/smj.2023

- Latham, G. P., & Piccolo, R. F. (2012). The effect of context-specific versus nonspecific subconscious goals on employee performance. *Human Resource Management*, 51(4), 511-523. doi:10.1002/hrm.21486
- Lawler, E. E. (2009). Make human capital a source of competitive advantage. *Organizational Dynamics*, *38*(1), 1-7. doi:10.1016/j.orgdyn.2008.10.007
- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. (2009). Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between baby boomers and generation X. *Journal of Nursing Management, 17*, 100-109. doi:10.1111/j.1365-2834.2008.00884.x
- Lin, S., Hunug, T. C., & Lee, C. T. (2015). Revalidate forms of presence in training effectiveness: Mediating effect of self-efficacy. *Journal of Educational Computing*, 53(1), 32-54. doi:10.1177/0735633115588772
- Link, K., & Muller, B. (2015). Delegating HR work to the line: Emerging tensions and insights from a paradox perspective. *Zeitchrift Fur Personalforschung*, 29(3/4), 280-302. doi:10.1688/ZfP-2015-03-Link
- Lines, D. (2011). The generation Y effect on L&D. *Training Journal*, 40-43. Retrieved from http://www.voced.edu.au/word/44190
- Lines, R. (2007). Using power to install strategy: The relationships between expert power, position power, influence tactics and implementation success. *Journal of Change Management*, 7(2), 143-170. doi:10.1080/14697010701531657

- Liu, C. H. S. (2018). Examining social capital, organizational learning and knowledge transfer in cultural and creative industries of practice. *Tourism Management*, 64, 258-270. doi:10.1016/j.tourman.2017.09.001
- Lyons, S., Urick, M., Kuron, L., & Schweitzer, L. (2015). Generational differences in the workplace: There is complexity beyond the stereotypes. *Industrial and Organizational Psychology*, 8(3), 346-356. doi:10.1017/iop.2015.48
- Macy, M. (2005). Learning theory. In G. Ritzer (Ed.) *Encyclopedia of social theory*. (pp. 437-439). Thousand Oaks, CA: Sage. doi:10.4135/9781412952552.n165
- MacCormick, J. S., & Parker, S. K. (2010). A multiple climates approach to understanding business unit effectiveness. *Human Relations*, 63(11), 1771-1806. doi:10.1177/0018726710365090
- Madsen, S., Bødker, K., & Tøth, T. (2015). Knowledge transfer planning and execution in offshore outsourcing: An applied approach. *Information Systems Frontiers*, *17*(1), 67-77. doi:10.1007/s10796-014-9516-3
- Mahmood, K. (2017). Reliability and validity of self-efficacy scales assessing students' information literacy skills. *The Electronic Library*, *35*(5), 1035–1051.
 doi:10.1108/el-03-2016-0056
- Man, D. K., Poon, W. S., & Lam, C. (2013). The effectiveness of artificial intelligent 3-D virtual reality vocational problem-solving training in enhancing employment opportunities for people with traumatic brain injury. *Brain Injury*, 27(9), 1016. doi:10.3109/02699052.2013.794969

- Martocchio, J. J. (1994). Effects of conceptions of ability on anxiety, self-efficacy, and learning in training. *Journal of Applied Psychology*, *79*(6), 819-825.
 doi:10.1037/0021-9010.79.6.819
- Mason, D. M., & Ide, B. (2014). Adapting qualitative research strategies to technology savvy adolescents. *Nurse Researcher*, *21*(5), 40-45. doi:10.7748/nr.21.5.40.e1241
- Matherly, L. L., Amin, N., & Al Nahyan, S. S. K. (2017). The impact of generation and socioeconomic status on the value of higher education in the UAE: A longitudinal study. *International Journal of Educational Development*, 55, 1-10. doi:10.1016/j.ijedudev.2017.04.002
- McAlearney, A. S., Robbins, J., Kowalczyk, N., Chisolm, D. J., & Song, P. H. (2012).
 The role of cognitive and learning theories in supporting successful HER system implementation training: A qualitative study. *Medical Care Research and Review*, 69(3), 294-315. doi:10.1177/1077558711436348
- McCracken, M., Brown, T. C., & O'Kane, P. (2012). Swimming against the current. *The International Journal of Public Sector Management*, 25(4), 301-316. doi:10.1108/09513551211244124
- McDaniel, M. A., Fadler, C. L., & Pashler, H. (2013). Effects of spaced versus massed training in function learning. *Journal of Experimental Psychology: Learning, Memory & Cognition, 39*(5), 1417-1432. doi:10.1037/a0032184
- Michels, N. R., & Vanhomwegen, E. (2019). An educational study to investigate the efficacy of three training methods for infiltration techniques on self-efficacy and

skills of trainees in general practice. *BMC Family Practice*, 20(1), 133. https://doi-org.ezp.waldenulibrary.org/10.1186/s12875-019-1023-7

Morin, A. J. S., Meyer, J. P., Belanger, E., Boudrias, J. S., Gagne, M. & Parker, P. D.
(2016). Longitudinal associations between employees' beliefs about the quality of the change management process, affective commitment to change and psychological empowerment. *Human Relations, 69*(3), 839-867.
doi:10.1177/0018726715602046

- Morrison, M. A., & Lent, R. W. (2014). The advisory working alliance and research training: Test of a relational efficacy model. *Journal of Counseling Psychology*, 61(4), 549-559. doi:10.1037/cou0000030
- Mukherjee, D. (2017). Hidden costs of offshore outsourcing: An analysis of offshoring decisions. *Journal of Industry, Competition and Trade*. doi:10.1007/s10842-017-0259-y
- Nakai, Y. (2015). Why we study generations. *Industrial and Organizational Psychology*, 8(3), 331-334. doi:10.1017/iop.2015.44
- Nembhard, D. A., & Bentefouet, F. (2014). Selection policies for a multifunctional workforce. *International Journal of Production Research*, 52(16), 4785-4802. doi:10.1080/00207543.2014.887231
- Neubert, M. J., & Dyck, B. (2016). Developing sustainable management theory: Goal-setting theory based in virtue. *Management Decision*, 54(2), 304-320.
 doi:10.1108/MD-05-2014-0312

- Ng, T. W. H., & Feldman, D. C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personal Psychology*, 65, p. 821-858. doi:10.1111/peps.12003
- Nistor, N., Dehne, A., & Drews, F. T. (2010). Mass customization of teaching and training in organizations: design principles and prototypes evaluation. *Studies in Continuing Education*, 32(3), 251-267. doi:10.1080/0158037X.2010.517996
- O'Connor, J. (2015). Another kind of difference: A new organizational approach. *Human Resource Management International Digest, 23*(5), 33-34. doi:10.1108/HRMID-05-2015-0090
- Otey, B. S. (2013). Millennials, technology, and professional responsibility: Training a new generation in technological professionalism. *Journal of the Legal Profession*, 37(2), 199-264. Retrieved from

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=24220153

- Paas, F., Tuovinen, J. E., van Merriënboer, J. J. G., & Darabi, A. A. (2005). A motivational perspective on the relation between mental effort and performance: optimizing learner involvement in instruction. *Educational Technology Research & Development*, *53*(3), 25-34. doi:10.1007/bf02504795
- Paas, F., van Gog, T., & Sweller, J. (2010). Cognitive load theory: New conceptualizations, specifications, and integrated research perspectives.
 Educational Psychology Review, 22(2) 115-121. doi:10.1007/s10648-010-9133-8

Pace, R. T., Boykins, A. D., & Davis, S. P. (2014). A proactive classroom management model to enhance self-efficacy levels in teachers of adolescents who display disruptive behavior. *Journal of Psychosocial Nursing & Mental Health Services*, 52(2), 30-37. doi:10.3928/02793695-20130930-01

Palo, S., & Padhi, N. (2003) Measuring effectiveness of TQM training: An Indian study. *International Journal of Training and Development*, 7(3), 203-216. doi:10.1111/1468-2419.00181

Patterson, R. E., Pierce, B. J., Bell, H. H., & Klein, G. (2010). Implicit learning, tacit knowledge, expertise development, and naturalistic decision making. *Journal of Cognitive Engineering and Decision Making*, 4(4), 289-303.
doi:10.1177/155534341000400403

- Pattni, I., & Soutar, G. N. (2009). The effectiveness of self-management training in organisations from two culturally different countries. *The Journal of Management Development*, 28(7), 633-646. doi:10.1108/02621710910972733
- Pendergast, D. (2009). Generational theory and home economics: Future proofing the profession. *Family & Consumer Sciences Research Journal*, 37(4), 504-522. doi:10.1177/1077727X09333186
- Phipps, S. T. A., Prieto, L. C., & Ndinguri, E. N. (2013). Teaching an old dog new tricks: Investigating how age, ability, and self-efficacy influence intentions to learn and learning among participants in adult education. *Academy of Educational*

Leadership Journal, 17(1), 13-25. Retrieved from

http://www.alliedacademies.org/articles/aeljvol17no12013.pdf

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91. Retrieved from https://hbr.org/

Prokopcakova, A. (2015). Personal need for structure, anxiety, self-efficacy and optimism. *Studia Psychologica*, 57(2), 147-162. Retrieved from http://psychologia.sav.sk/sp/

- Quintana, T., Park, S., & Cabrera, Y. (2015). Assessing the effects of leadership styles on employees' outcomes in international luxury hotels. *Journal of Business Ethics*, 129(2), 469-489. doi:10.1007/s10551-014-2170-3
- Ringberg, T., & Reihlen, M. (2008). Towards a socio-cognitive approach to knowledge transfer. *Journal of Management Studies*, *45*(5), 912–935. doi:10.1111/j.1467-6486.2007.00757.x
- Riva, G., Banos, R., Botella, C., Wiederhold, B., & Gaggioli, A. (2012). Positive technology: Using interactive technologies to promote positive functioning. *Cyberpsychology, Behavior, & Social Networking, 15*, 69-77. doi:10.1089/cyber.2011.0139
- Ropes, D. (2014). Intergenerational learning in organizations: An effective way to stimulate older employee learning and development. *Development and Learning in Organizations*, 28(2), 7-9. doi:10.1108/DLO-10-2013-0078

- Rusly, F., Sun, P. Y. T., & Corner, J. L. (2014). The impact of change readiness on the knowledge sharing process for professional service firms. *Journal of Knowledge Management*, 18(4), 687-709. doi:10.1108/JKM-01-2014-0007
- Saks, A. M. (1994). Moderating effects of self-efficacy for the relationship between training method and anxiety and stress reactions of newcomers. *Journal of Organizational Behavior*, 15, 639-654. doi:10.1002/job.4030150707
- Sanders, J. M. A. F., Damen, M. A. W., & Van Dam, K. (2015). Are positive learning experiences levers for lifelong learning among low educated workers? *Evidence-Based HRM: A Global Forum for Empirical Scholarship, 3*(3), 244-257. doi:10.1108/ebhrm-01-2014-0002
- Santos, R. (2012). Andragogy content knowledge technology: A training model for teaching adults (Dissertation). Retrieved from ProQuest Dissertations & Theses Global. UMI 3505062
- Sasikala, S., & Anthonyraj, S.V. (2015). Self-efficacy, emotional intelligence and organizational commitment in relation to resistance to change among employees. *Annamalai International Journal of Business Studies & Research*, 30-35. Retrieved from http://www.auent.org/publications/

Schullery, N. M. (2013). Workplace engagement and generational differences in values.
 Business Communication Quarterly, 76(2) 252-265.
 doi:10.1177/1080569913476543

- Serdiuk, L., & Penkova, O. (2015). Persons' self-improvement as an integrated selfdetermined phenomenon. *Social Welfare Interdisciplinary Approach*, 5(1), 73-81. Retrieved from http://www.socialwelfare.eu/index.php/sw/index
- Schiffthaler, B., Kostadima, M., Delhomme, N., & Rustici, G. (2016). Training in high-throughput sequencing: common guidelines to enable material sharing, dissemination, and reusability. *Plos Computational Biology*, *12*(6), 1-10. doi:10.1371/journal.pcbi.1004937
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman,
 S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio*. *Causal and control beliefs* (pp. 35-37). Windsor, UK: Nfer-Nelson. Retrieved
 from http://userpage.fu-berlin.de/~health/selfscal.htm
- Schwarzer, R., & Jerusalem, M. (1999). Scales for the detection of teacher and student characteristics: Documentation of psychometric procedures within the framework of the scientific accompaniment of the model experiment self-affecting schools.
 Berlin: Free University of Berlin.
- Singh, V. (2013). Exploring the concept of work across generations. Journal of Intergenerational Relationships, 11, 272-285. doi:10.1080/15350770.2013.810498
- Sprinkle, T. A., & Urick, M. J. (2018). Three generational issues in organizational learning: Knowledge management, perspectives on training and "low-stakes"

development. *The Learning Organization, 25*(2), 102-112. doi:10.1108/TLO-02-2017-0021

- Soroka, A., Liu, Y., Han, L., & Haleem, M. S. (2017). Big data driven customer insights for SMEs in redistributed manufacturing. *Procedia CIRP*, 63, 692-697. doi:10.1016/j.procir.2017.03.319
- Stanley, M. A., Novy, D. M., Hopko, D. R., Beck, J. G., Averill, P. M., & Swann, A. C. (2002). Measures of self-efficacy and optimism in older adults with generalized anxiety. *Assessment*, 9(1), 70-81. doi:10.1177/1073191102009001009
- Starks, A. (2013). The forthcoming generational workforce transition and rethinking organizational knowledge transfer. *Journal of Intergenerational Relationships*, *11*(3), 223-237, doi:10.1080/15350770.2013.810494
- Steel, P., & Kammeyer-Mueller, J. (2015). The world is going to hell, the young no longer respect their elders, and other tricks of the mind. *Industrial and Organizational Psychology*, 8(3) 366-371. doi:10.1017/iop.2015.51.
- Stone, K. B. (2010). Kaizen teams: Integrated HRD practices for successful team building. *Advances in Developing Human Resources*, 12(1), 61–77. doi:10.1177/1523422310365333
- Sweller, J. (1988). Cognitive load during problem-solving: Effects on learning. *Cognitive Science*, *12*, 257–285. doi:10.1207/s15516709cog1202_4
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. *Learning and Instruction*, *4*(4), 295-312. doi:10.1016/0959-4752(94)90003-5

- Tews, M. J., & Noe, R. A. (2017). Does training have to be fun? A review and conceptual model of the role of fun in workplace training. *Human Resource Management Review*, 1-13 doi:10.1016/j.hrmr.2017.11.003
- Tracey, J. B., Hinkin, T. R., Tran, T. L. B. Emigh, T., Kingra, M., Taylor, J., & Thorek,
 D. (2015). A field study of new employee training programs: Industry practices and strategic insights. *Cornell Hospitality Quarterly*, 56(4), 345-354.
 doi:10.1177/1938965514554211
- Urick, M. J. (2014). The presentation of self: Dramaturgical theory and generations in organizations. *Journal of Intergenerational Relationships*, *12*(4), 398-412, doi:10.1080/15350770.2014.961829
- U.S. Bureau of Labor Statistic. (2018). https://www.bls.gov/
- Valkeavaara, T. (1998). Exploring the nature of human resource developers' expertise. *European Journal of Work and Organizational Psychology*, 7(4), 533-547.
 doi:10.1080/135943298398583
- Van Volkom, M., Stapley, J. C., & Amaturo, V. (2014). Revisiting the digital divide:
 Generational differences in technology use in everyday life. *North American Journal of Psychology, 16*(3), 557-574. Retrieved from http://www.najp.us
- Visnjic, I., Jovanovic, M. Neely, A., & Engwall, M. (2017). What brings the value to outcome-based contract providers? Value drivers in outcome business models. *International Journal of Production Economics*, *192*, 169-181. doi:10.1016/j.ijpe.2016.12.008

- Vitulli, P. P., Giles, R. M., & Shaw Jr., E. L. (2014). The effects of knowledge maps on acquisition and retention of visual arts concepts in teacher education. *Education Research International*, 1-10. doi:10.1155/2014/902810
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Wang, Y., & Peng, Y. (2015). An alternative approach to understanding generational differences. *Industrial and Organizational Psychology*, 8(3), 390-395. doi:10.1017/iop.2015.56
- Wickramasinghe, V. (2015). Effects of human resource development practices on service quality of services offshore outsourcing firms. *International Journal of Quality & Reliability Management, 32*(7), 703-717. doi:10.1108/IJQRM-03-2013-0047
- Wieland, A., Durach, C. F., Kembro, J., & Treiblmaier, H. (2017). Statistical and judgmental criteria for scale purification. *Supply Chain Management: An International Journal, 22*(4). doi:10.1108/SCM-07-2016-0230

World Economic Forum. (2018). www.weflive.com

- Yang, H., Sackett, P. R., & Arvey, R. D. (1996). Statistical power and cost in training evaluation: some new considerations. *Personnel Psychology*, 49(3), 651-668. doi:10.1111/j.1744-6570.1996.tb01588.x
- Yang, T., Hwang, G.J., & Yang, S. J. H. (2014). Development of an interactive test system for students' improving learning outcomes in a computer programming

course. *Advanced Learning Technologies (ICALT), 2014 IEEE 14th International Conference*, 637-639. doi:10.1109/icalt.2014.186

- Yeh, S. S. (2000). Building the knowledge base for improving educational and social programs through planned variation evaluations. *American Journal of Evaluation*, 21(1), 27-40. doi:10.1016/s1098-2140(00)00054-0
- Yi, X., Ribbens, B., Fu, L., & Cheng, W. (2015). Variation in career and workplace attitudes by generation, gender, and culture differences in career perceptions in the United States and China. *Employee Relations*, *37*(1), 66-82. doi:10.1108/ER-01-2014-0005
- Zacher, H. (2015). Using lifespan developmental theory and methods as a viable alternative to the study of generational differences at work. *Industrial and Organizational Psychology*, 8(3), 342-346. doi:10.1017/iop.2015.47
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2),185-203. doi:10.2307/4134351
- Zhao, J. Y., Qi, Z. Y., & de Pablos, P. O. (2014). Enhancing enterprise training performance: Perspectives from knowledge transfer and integration. *Computers in Human Behavior*, 30, 567-573. doi:10.1016/j.chb.2013.06.041
- Zuckerman, M. (1979). Attribution success and failure revised, or: The motivational bias is alive and well in attribution theory. *Journal of Personality*, *47*(2), 245–287. doi:10.1111/1467-6494.ep7594052

Appendix A: Survey Questionnaire

Instructions: Please complete the following demographic questions about your training background. Training involves working with employees of a company, any company or organization, to improve their knowledge, skills, or behaviors in pursuit of achieving

organizational goals and to be better employees.

- 1. How many years have you been an external organizational trainer conducting training programs/curriculum "in-house" or "externally" to the organization?
 - a) 0 years to 3 years
 - b) More than 3 years to 8 years
 - c) More than 8 years to 14 years
 - d) More than 14 years to 21 years
 - e) More than 21 years
- b. What is your chronological age?
 - a) 20 to 35 Years
 - b) 36 to 45 Years
 - c) 46 to 55 Years
 - d) 56 to 65 Years
 - e) 66 Years or older
- c. What is the highest level of education you attained?
 - a) High School Diploma/Equivalent
 - b) Associates Degree
 - c) Bachelors Degree
 - d) Masters/MBA Degree
 - e) Doctoral Degree (EdD)
 - f) PhD
- 4. Please prioritize your training methodology(ies) utilized for training sessions with employees? Number all that apply (list 1 as most used, and so on):
 - a) Classroom style, face-to-face
 - b) Online learning management system
 - c) Conference call / Phone conversation

- d) One-on-one training
- e) Instant messaging
- f) WebEx meetings
- g) Skype or live-broadcast meetings
- h) Other:
- 5. Which level of employees do you typically conduct training? Please prioritize all that apply (List 1 as most often trained, and so on):
 - a) C-Suite Level
 - b) Executive Management
 - c) Director/General Management
 - d) Middle Management
 - e) Supervisory Management
 - f) Front-Line employees
 - g) Staff/Administrators/Support Services
 - h) Contractors
- 6. Number of training sessions/year you have been conducting across the board, any type of content, with any group or position level, and with any training methodology?
 - a) 5-10
 - b) 11-20
 - c) 21-30
 - d) 31-40
 - e) 41-50
 - f) 51-60
 - g) More than 60

Appendix B: Trainers Development of Self-Efficacy Survey

Instructions: Please select the best answers as it pertains to your specific training

behaviors regarding the development of self-efficacy in trainees/organizational

employees over time. Self-efficacy is the ability of an employee to take the knowledge,

skills, and behaviors learned from training and apply them to their job or task to achieve

organizational goals and objectives.

Survey Questionnaire Trainers Development of Self-Efficacy Survey	All the time (100%)	Most of the time (75%)	Some of the time (50%)	Infrequently (25%)	Never (0%)
1. How often do your gather training needs information from the different trainees regarding the development and delivery of the training program?	А	В	С	D	Е
2. How often does the training program focus on a specific generational group needs, regardless of the trainees in the training program?	А	В	С	D	Е
3. How often do you utilize different training programs for different generational groups to satisfy their training needs?	А	В	С	D	Е
4. How often do you gather feedback from different generational trainees regarding the attainment of self-efficacy?	А	В	С	D	Е
5. How often do you alter your training programs based on the feedback from different generational trainees regarding the development of self-efficacy?	А	В	С	D	Е
6.How often does your training program address specific generational needs of employees while covering the same content of material?	А	В	С	D	E
7. How often does the selection of the training methodology focus on specific generational employees?	А	В	С	D	Е
8. How often do you utilize different learning styles within your training methodology?	А	В	С	D	Е

Survey Questionnaire Trainers Development of Self-Efficacy Survey	All the time (100%)	Most of the time (75%)	Some of the time (50%)	Infrequently (25%)	Never (0%)
9. How often do you conduct pilot programs of the training methodology before implementing the full program?	А	В	С	D	Е
10. How often do you gather feedback regarding the effectiveness of different methodologies in the attainment of self-efficacy for the trainees?	А	В	С	D	E
11. How often do you alter your training programs to incorporate different training methodologies based on the feedback on the development of self-efficacy?	А	В	С	D	E
12. How often does your training program provide the same content utilizing the same methodology to different generational employees?	А	В	С	D	E
13. How often does the training program and delivery focus on the specific needs of employees at different position levels of the organization?	А	В	С	D	E
14. How often do you utilize the same training program for all position levels of individuals within the organization?	А	В	С	D	E
15. How often do the trainees at different position levels within the organization achieve efficacy from the training program? (Difficult to know; but as a trainer, do you experience or have requests for retraining or continued support services over time, if not then assumed that efficacy is attained).	А	В	С	D	E
16. How often do you gather feedback from different position level trainees regarding the attainment of self-efficacy?	А	В	С	D	Е
17. How often do you alter your training programs based on the feedback on self-efficacy?	А	В	С	D	E
18. How often does your training program provide the same content to different position levels of employees within the organization?	А	В	С	D	E

Appendix C: Demographic Data



Figure C1. Participant percentage by job title



Figure C2 Departmentalization of responsibilities.

Table C1

Statistical Table for Question 2

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	2. What department do you primarily function?- Selected Choice	1.00	9.00	4.21	2.26	5.10	146
T-1-	1- 02						

Table C2

Percentages for Question 2

#	Answer	%	Count
1	Accounting/Auditing/Purchasing	11.64%	17
2	Business Support Services	4.79%	7

3	HR/Benefits/Compliance	28.77%	42
4	IT/Cyber-Security	26.03%	38
5	Manufacturing	4.79%	7
6	Marketing/Advertising	1.37%	2
7	Operations/Facilities	10.27%	15
8	Sales/Social Media	5.48%	8
9	Other	6.85%	10
	Total	100%	146



Figure C3. Participants age and number of years training. Categories of the number of trainings are represented by the following:

- 0 = Zero Years (Anyone selecting this option was excluded)
- 1 = 1 Year of Training
- 2 = 1 3 Years of Training
- 4 = 3 8 Years of Training
- 6 = 8 14 Years of Training
- 8 = 14 21 Years of Training
- 10 = 21 +Years of Training



Figure C4. Educational level and number of trainings each year average. Categories of the number of trainings are represented by the following:

- 0 = Zero Trainings (Anyone selecting this option was excluded)
- 2 = 10 20 Training per year
- 4 = 20 30 Training per year
- 6 = 30 40 Trainings per year
- 8 = 40 50 Trainings per year
- 10 = 50 + Trainings per year



Figure C5. Level of employees trained. Data based on Q5. Which level of employees do you typically conduct training? Please prioritize all that apply (List 1 as most often trained, and so on).

Table C3

Statistical Table for Question 5

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	C-Suite Level	1.00	8.00	4.65	2.91	8.45	137
2	Executive Management	1.00	8.00	4.79	2.30	5.27	138
3	Director/General Management	1.00	8.00	4.56	1.62	2.63	140
4	Middle Management	1.00	8.00	4.14	1.64	2.68	140
5	Supervisory Management	1.00	8.00	4.09	1.53	2.34	141
6	Front-Line employees	1.00	8.00	3.90	2.27	5.15	140
7	Staff/Administrators/Support Services	1.00	8.00	4.09	2.41	5.80	141
8	Contractors	1.00	8.00	5.29	2.83	7.99	132



Figure C6. Training methodology. Based on Q4. Please prioritize your training methodology(ies) utilized for training sessions with employees? Number all that apply (list 1 as most used, and so on): Must rank all

Table C4

Sta	tistical Table for Q4						
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Classroom style, face- to-face	1.00	7.00	3.07	2.45	6.01	142
2	Online learning management system	1.00	7.00	4.06	1.93	3.74	143
3	Conference call / Phone conversation	1.00	7.00	4.06	1.71	2.91	141
4	One-on-one training	1.00	7.00	3.62	1.71	2.91	143
Appendix D: Raw Data Charts and Tables

The following figures show the results of the survey questionnaire for the 18 questions in the survey.

Q1: How often do your gather training needs information from the different trainees regarding the development and delivery of the training program?



Figure D1. Bar graph for answers to Question 1.

Table D1

Statisti	cs for Qı	estion 1				
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.16	0.98	0.95	146	

Table D2

Answer	0/0	Count
All the time (100%)	28.77	42
Most of the time (75%)	36.99	54
Some of the time (50%)	26.03	38
Infrequently (25%)	6.16	9
Never (0%)	2.05	3
Total	100	146

Q2: How often does the training program focus on a specific generational group needs, regardless of the trainees in the training program?



Figure D2. Bar graph for answers to Question 2.

Table D3

Statisti	cs for Qi	estion 2				
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.35	1.12	1.25	146	

Percentages	for	Question	2
r ei eenneges.	,01	2000000	_

Answer	%	Count
All the time (100%)	24.66	36
Most of the time (75%)	37.67	55
Some of the time (50%)	20.55	30
Infrequently (25%)	12.33	18
Never (0%)	4.79	7
Total	100	146

Q3: How often do you utilize different training programs for different generational groups to satisfy their training needs?



Figure D3. Bar graph for answers to Question 3.

Table D5

Statisti	cs for Qi	estion 3				
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.23	0.97	0.93	146	

Table D6

Answer	%	Count	
All the time (100%)	25.34	37	
Most of the time (75%)	36.30	53	
Some of the time (50%)	30.14	44	
Infrequently (25%)	6.16	9	
Never (0%)	2.05	3	
Total	100	146	

Q4: How often do you gather feedback from different generational trainees regarding the attainment of self-efficacy?



Figure D4. Bar graph for answers o Question 4.

Table D7

Statisti	cs for Qı	estion 4				
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.08	1.01	1.02	146	

Percentages for Question 4

Answer	%	Count
All the time (100%)	33.56	49
Most of the time (75%)	35.62	52
Some of the time (50%)	22.60	33
Infrequently (25%)	5.48	8
Never (0%)	2.74	4
Total	100	146

Q5: How often do you alter your training programs based on the feedback from different generational trainees regarding the development of self-efficacy?



Figure D5. Bar graph for answers to Question 5.

Table D9

Statisti	cs for Qi	estion 5			
Min.	Max.	Mean	SD	Variance	Count
1.00	5.00	2.11	0.83	0.69	146

Percentages for Question 5

Answer	%	Count
All the time (100%)	23.97	35
Most of the time (75%)	45.89	67
Some of the time (50%)	26.03	38
Infrequently (25%)	3.42	5
Never (0%)	0.68	1
Total	100	146

Q6: How often does your training program address specific generational needs of employees while covering the same content of material?



Figure D6. Bar graph for answers to Question 6.

Table D11

Statisti	cs for Qı	estion 6				
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.25	1	0.99	146	

Percentages for Question 6

Answer	%	Count	
All the time (100%)	24.66	36	
Most of the time (75%)	40.41	59	
Some of the time (50%)	21.92	32	
Infrequently (25%)	11.64	17	
Never (0%)	1.37	2	
Total	100	146	

Q7: How often does the selection of the training methodology focus on specific generational employees?



Figure D7. Bar graph for answers to Question 7.

Table D13

Statisti	Statistics for Question 7							
Min.	Max.	Mean	SD	Variance	Count			
1.00	5.00	2.39	1.01	1.02	146			

Percentages for Question 7

Answer	%	Count	
All the time (100%)	20.55	30	
Most of the time (75%)	34.93	51	
Some of the time (50%)	32.88	48	
Infrequently (25%)	8.22	12	
Never (0%)	3.42	5	
Total	100	146	



Q8: How often do you utilize different learning styles within your training methodology?

Figure D8. Bar graph for answers to Question 8.

Table D15

Statistics for Question 8

Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.14	0.91	0.83	146	

Table D16

Answer	%	Count
All the time (100%)	26.71	39
Most of the time (75%)	40.41	59
Some of the time (50%)	26.71	39
Infrequently (25%)	4.79	7
Never (0%)	1.37	2
Total	100	146

Q9: How often do you conduct pilot programs of the training methodology before implementing the full program?



Figure D9. Bar graph for answers to Question 9.

Table D17

Statisti	Statistics for Question 9							
Min.	Max.	Mean	SD	Variance	Count			
1.00	5.00	2.52	1.20	1.44	146			

Table D18

Answer	%	Count	
All the time (100%)	21.92	32	
Most of the time (75%)	34.25	50	
Some of the time (50%)	21.23	31	
Infrequently (25%)	15.07	22	
Never (0%)	7.53	11	
Total	100	146	

Q10: How often do you gather feedback regarding the effectiveness of different methodologies in the attainment of self-efficacy for the trainees?



Figure D10. Bar graph for answers to Question 10.

Table D19

Statisti	cs for Qu	estion 1	0			
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.12	0.99	0.98	146	

Percentages for Question 10

Answer	%	Count	
All the time (100%)	29.45	43	
Most of the time (75%)	39.73	58	
Some of the time (50%)	23.29	34	
Infrequently (25%)	4.11	6	
Never (0%)	3.42	5	
Total	100	146	

Q11: How often do you alter your training programs to incorporate different training methodologies based on the feedback on the development of self-efficacy?



Figure D11. Bar graph for answers to Question 11.

Table D21

Statistie	cs for Qi	estion 1	1		
Min.	Max.	Mean	SD	Variance	Count
1.00	5.00	2.12	0.83	0.70	146

Percentages for Question 11

Answer	%	Count	
All the time (100%)	23.97	35	
Most of the time (75%)	45.21	66	
Some of the time (50%)	25.34	37	
Infrequently (25%)	5.48	8	
Never (0%)	0.00	0	
Total	100	146	

Q12: How often does your training program provide the same content utilizing the same methodology to different generational employees?



Figure D12. Bar graph for answers to Question 12.

Table D23

Statistics for Question 12							
Min.	Max.	Mean	SD	Variance	Count		
1.00	5.00	2.11	0.96	0.92	146		

Percentages for Question 12

Answer	%	Count	
All the time (100%)	29.45	43	
Most of the time (75%)	39.04	57	
Some of the time (50%)	25.34	37	
Infrequently (25%)	3.42	5	
Never (0%)	2.74	4	
Total	100	146	

Q13: How often does the training program and delivery focus on the specific needs of employees at different position levels of the organization?



Figure D13. Bar graph for answers to Question 13.

Table D25

Statisti	Statistics for Question 13						
Min.	Max.	Mean	SD	Variance	Count		
1.00	5.00	2.04	0.87	0.77	146		

Percentages for Question 13

Answer	%	Count
All the time (100%)	29.45	43
Most of the time (75%)	43.15	63
Some of the time (50%)	21.92	32
Infrequently (25%)	4.79	7
Never (0%)	0.68	1
Total	100	146

Q14: How often do you utilize the same training program for all position levels of individuals within the organization?



Figure D14. Bar graph for answers to Question 14.

Table D27

Statisti	cs for Qi	estion 1	4			
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.39	0.96	0.92	146	

Percentages for Question 14

Answer	%	Count
All the time (100%)	19.86	29
Most of the time (75%)	33.56	49
Some of the time (50%)	36.30	53
Infrequently (25%)	8.22	12
Never (0%)	2.05	3
Total	100	146

Q15: How often do the trainees at different position levels within the organization achieve efficacy from the training program? (Difficult to know; but as a trainer, do you experience or have requests for retraining or continued support services over time, if not then assumed that efficacy is attained).



Figure D15. Bar graph for answers to Question 15.

Table D29

Statisti	Statistics for Question 15							
Min.	Max.	Mean	SD	Variance	Count			
1.00	5.00	2.25	0.96	0.93	146			

Percentages for Question 15

Answer	%	Count
All the time (100%)	24.66	36
Most of the time (75%)	37.67	55
Some of the time (50%)	26.71	39
Infrequently (25%)	10.27	15
Never (0%)	0.68	1
Total	100	146

Q16: How often do you gather feedback from different position level trainees regarding the attainment of self-efficacy?



Figure D16. Bar graph for answers to Question 16.

Table D31

Statistic	cs for Qi	estion 1	6			
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.12	0.98	0.96	146	

Percentages for Question 16

Answer	%	Count
All the time (100%)	31.51	46
Most of the time (75%)	34.25	50
Some of the time (50%)	26.03	38
Infrequently (25%)	6.85	10
Never (0%)	1.37	2
Total	100	146





Figure D17. Bar graph for answers to Question 17.

Table D33

Statistics for Question 17						
Min.	Max.	Mean	SD	Variance	Count	
1.00	5.00	2.17	0.92	0.84	146	

Percentages for Question 17

Answer	%	Count
All the time (100%)	28.08	41
Most of the time (75%)	33.56	49
Some of the time (50%)	31.51	46
Infrequently (25%)	6.85	10
Never (0%)	0.00	0
Total	100	146

Q18: How often does your training program provide the same content to different position levels of employees within the organization?



Figure D18. Bar graph for answers to Question 18.

Table D35

Statistie	Statistics for Question 18						
Min.	Max.	Mean	SD	Variance	Count		
1.00	5.00	2.27	0.94	0.88	146		

Percentages for Question 18

Answer	%	Count
All the time (100%)	23.97	35
Most of the time (75%)	35.62	52
Some of the time (50%)	30.14	44
Infrequently (25%)	10.27	15
Never (0%)	0.00	0
Total	100	146