SUPERVISOR SUPPORT, GOAL SETTING, AND LEVELS OF EXPERIENCE AS PREDICTORS OF TRAINING TRANSFER

by

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Abstract

This study examined goal setting, supervisor support, and level of experience as part of posttraining strategies affecting training transfer. Companies make substantial investments in training their employees to maintain a competitive edge in their industries. Approximately 80% of organizations do not gauge their return on investment for their training. The specific strategies used posttraining to increase training transfer are unclear in the research. This study was a quantitative nonexperimental design using a standard multiple regression. The population for this study was adults 18 years and older who were employed full-time in a nonsupervisory role in a sales/retail position and that had participated in training within the last 6 months. Purposive sampling was chosen for this research because it is one of the most cost-effective and timeeffective sampling methods available. The sample size of this study was 90. Data were obtained using an online survey, the Learning Transfer System Inventory. Hypotheses were tested and all assumptions of multiple regression analysis were met. The standard multiple regression model showed the statistical significance of the predictor variables on training transfer. The predictor variable of goal setting showed to be significant. The null hypothesis stating that when all other predictor variables are held constant, the variable of goal setting will not show a significant contribution to the overall regression was rejected. The remainder of the predictor variables, supervisor support and level of experience, did not show statistically significant results. Findings from this research indicate that further research is needed to understand better the factors that contribute to training transfer in the sales industry and how to address those factors as they pertain to training transfer.



Dedication

This entire PhD journey is dedicated to my family. To my daughter, Sophia, my love for you fuels everything I do. To the world, you may be one person, but to me, you are my world. To my mother, Patricia, the strongest person I know, who taught me to trust in God and that so much could be done with a little faith, thank you for being the driving force of our family and for sacrificing all that you have so that I could have the life that I do. To my father, George, who has been telling me since I have had a heartbeat that there is nothing that I cannot do, thank you for always encouraging me to achieve more than I thought was possible. You taught me to believe in myself. To my sister, Daphne, your support through this process is something that I never thought I would get from you. It is because of you that I had the time to dedicate myself to this process. My love for you is boundless. To Andrew, my ultimate cheerleader, thank you for all your encouragement, for always checking in on me during this journey, and for always believing that I have got this. I am the Goose to your Maverick. To every single one of my sanity sisters— Zi, Jess, Cristy, Heather, and Cherina-we are all bonded for life through this unique process. Your support meant the world to me. Each one of you ensured that I was able to complete this journey, for which I am especially grateful.



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CHAPTER 1. INTRODUCTION

Organizations spend a substantial amount of time, energy, and funds to ensure that employees train in areas that will reflect positively on the bottom line. This study examined goal setting as part of posttraining strategies along with how supervisor support and level of experience affect training transfer. The study explored whether incorporating goals by supervisor posttraining increased training transfer. This study also considered supervisor support and level of experience affecting training transfer. Holton (1996) defined *transfer of training* as the point at which employees apply what they have learned in their training. These transfers include skills, attitudes, and organizational material (Holton, Bates, Seyler, & Carvalho, 1997). According to a study by Cheng and Ho (2001), trained employees stated that the skills acquired by their training were 16% of the effectiveness of training. Bates, Holton, and Hatala's (2012) study disclosed that only 10% of the invested training cost pays off for performance in the organization. These studies on training transfer span 16 years, and their information continues to be relevant.

Transfer of training has been a subject for much research. Companies make large investments in training their employees to maintain a competitive edge in their industries. Even though billions of dollars are spent on training and endless hours worked on sales or retail training, its result and effectiveness are rarely evaluated (Govaerts, Kyndt, Vreye, & Dochy, 2017; Jaidev & Chirayath, 2012; Poell, 2017). Approximately 80% of organizations do not gauge their return on investment for their training (Tan & Newman, 2013). It is, then, no surprise that those in upper management state that their sales training does not have a meaningful impact on sales figures overall (Tan & Newman, 2013). It is essential to reference any similarities and differences between general learning and learning in training. Formal education is insufficient for a reliable transfer of training; therefore, formal learning alone does not increase behavioral



changes. Informal learning allows learners to have chances to practice what they have learned in their work situations. Learning in the workplace varies from learning in an early educational setting. A school setting has a structured plan and is intentional in its delivery. Learning in the workplace is informal and at times less structured. Learning can benefit from both formal pieces of training with informal learning at the workplace. Training that is formal tends to support only individual knowledge but does not have the benefit of social interaction that assists in learning (Spaan, Dekker, van der Velden, & de Groot, 2016). A limitation is that studies usually happen in laboratory settings and not in a real-world environment (Rahyuda, Syed, & Soltani, 2014). Therefore, this study tried to survey participants in a real-world training setting.

Background of the Problem

Training is an intervention that is most commonly used by human resources departments (Jaidev & Chirayath, 2012). Leadership, communication, and setting attainable goals are all essential elements that may provide an organization with the necessary tools to be successful in implementing a change in the way that training transfer occurs. Organizational goals should connect and be relevant to the training offered to the employee (Curado, Henriques, & Ribeiro, 2015). It is the learning that takes place in the workplace regarding training that defines how it is transferred, by utilizing and critically reflecting on the knowledge gained to achieve organizational goals (Curado et al., 2015). An employee's goals must be aligned with corporate aims to assist in the training transfer process; this idea supports the organization with its financial performance. Organizational commitment identifies as a factor that affects the outcomes of training (Bhatti, Battour, Sundram, & Othman, 2013). Confirming that the organization provides posttraining strategies shows that a team is committed to the training process and ensuring that training transfer is successful. This study had a variable that consisted of goal setting as part of



posttraining strategies. Mandated training in retail or sales was the focus of the research.

Furthermore, this study looked at supervisor support under the organizational commitment umbrella.

Employees that are in nonsupervisory positions were targets in this study as it is a gap in the literature. In the past, research has focused on obtaining the transfer of training from supervisors. Gathering information from other sources such as employees themselves could improve the information on training transfer (Zumrah, 2015). Historically, research on training transfer has focused on supervisors and managers and has not investigated the employee perspective. Although this fact may be where the research is limited or a negative component of the research that is precisely where this study looked to place its focus. Govaerts et al. (2017) specifically looked at training transfer from the supervisor perspective. They noted that supervisor support is a critical part of training transfer yet failed to look at it from an employee standpoint. Freitas, Silva, and Santos (2019) included employees that did not hold a supervisory role, but they also included supervisor perspectives in the study. Training transfer is essential to research in industrial/organizational psychology because learning in training settings in the workplace can benefit the organization (Grohmann & Kauffeld, 2013; Rahyuda et al., 2014). The success of any training offered depends on the ability of the trainee to be able to transfer training (Rahyuda et al., 2014). Organizations repeatedly establish training programs that disregard the critical method of transferring gained knowledge and competencies to performance on the job (Curado et al., 2015).

As of 2010, companies were spending an estimated \$171.5 billion on human resources development and employee training annually (Lambright, 2010). From the perspective of industrial and organizational psychologists, training is a topic of extensive research. The idea



that there is so much money invested yearly by companies and that a reported 10% of the invested training cost pays off for performance in the organizations is of great interest (Bates et al., 2012). Consequently, there is much that is still unknown about training transfer. It is necessary for studies to highlight both what is known and proved through research and what yet must be examined further.

The literature on training transfer research indicates that it is known that supervisors should be of assistance to trainees during every step of the training process. Success in the training process includes specific strategies for pretraining, during training, and posttraining (Bhatti et al., 2013). It is known that supervisors can promote training transfer by giving employees an explanation of their expectations about their posttraining performance, assisting them in identifying opportunities for the implementation of learning, and providing information that helps employees (Dermol & Cater, 2013). It is known that studies of learning and outcome goal-setting intervention report a significant relationship between these types of goal setting and the perceived transfer of training (Brown & Warren, 2009). It is also known that much of the literature on goal setting lacks clarity about what specific goals affect the transfer of training (Rahyuda et al., 2014). It is known that as the primary contributor of salespersons' success, practical sales training is significant in firms' strategic advantage, organizational commitment, customer orientation, company revenues, and profits and leads to an increase in sales productivity (Attia, Jantan, Atteya, & Fakhr, 2014). It is also known that there are certain factors that are responsible for the success of training transfer: trainee characteristics, training design, and the work environment (Lancaster, Milia, & Cameron, 2013). Other factors include supervisors' assisting their trainees at every stage of the process: pretraining, during the training, and posttraining (Bhatti et al., 2013). What is not known is the specific kind of support at each



stage that would be beneficial to the transfer of knowledge, specifically for posttraining (Rahyuda et al., 2014). Research still must be done on what posttraining interventions work best to improve the transfer of training. It is also not known what variable might have differential influences on learning and performance such as training transfer (Soderstrom & Bjork, 2015). There is no agreement in the literature regarding which goal-setting types are more efficient to improve transfer training (Rahyuda et al., 2014). The research problem was the lack of clarity about which goal-setting interventions are most useful for training transfer—specifically, posttraining. It was, then, necessary to call on certain theories to assist with the confirmation of what is not known and specifics on what exactly is needed for successful training transfer.

This study had two primary theoretical bases: goal-setting theory and expectancy theory. The research problem and research questions were viewed through this lens to explore how these theories related to this issue. These theories have in the past been used extensively in training literature, specifically in training transfer literature. The goal-setting theory centers itself on the concept that a conscious goal affects action. The focus of the goal-setting theory is on the core properties of a practical goal (Dewettinck & Van Dijk, 2013). The features of the goal-setting theory consist of an explanation of the execution of how performance goals affect task performance. This theory considers the content of performance goals as a determining factor in how successful the implementation of the task was. This theory was used in Gardner, Diesen, Hogg, and Huerta (2016), whose study found that the presence of goals can lead to higher task performance as opposed to having a nonspecific goal. These results suggest when trainees do not have the knowledge or skill to perform a task efficiently, implementing goals that focus on creating successful strategies and processes are ideal for learning gains. Their findings also suggested that empowering trainees by teaching them when to set specific learning goals versus



when to establish specific performance goals can increase performance. Another study in which goal-setting theory was used is Vahidnia and Fatemi's (2015), which found that goal setting is imperative regarding motivation and learning. To improve motivation, setting goals is a good strategy. Also, this study advised that the goal-setting theory holds the first rank in validity and the second rank in efficacy compared to other motivational approaches. The goal-setting theory was used by I. O'Boyle and Cummins (2013), who suggested that the final part of an efficient goal-setting process is that individuals receive enough feedback from management on their progress about the achievement of the required objectives. The proposal was that an employee's behavior and performance can have a direct association with goal setting and objectives, and how difficult or easy it may be to achieve these goals. The focus of the goal-setting theory is on the core properties of a practical goal. This theory is for not only the individual but also the organization. Organizational goals should connect to training offered to the employee (Curado et al., 2015). This study illustrated how posttraining strategies can tie into organizational goals and assist with clearly setting attainable goals needed for transfer of knowledge.

This study tried to expand the expectancy theory by illustrating something new about application or processes, specifically, bridging the gap of what is unknown with the kind of support at each stage that would be beneficial to transfer of knowledge. Based on expectancy theory, valence—an individual's beliefs regarding the desirability of outcomes obtained from training—has been suggested to be related to training success (Colquitt, LePine, & Noe, 2000). According to expectancy theory, interactions between expectancy, instrumentality, and valence determine motivation (Lambright, 2010). Expectancy theory posits that employee motivation will be high to transfer training when there are high levels of expectancy, instrumentality, and valence. Expectancy theory contests that both individual and situational characteristics that have



an influence on the person that is trained (Gegenfurtner & Vauras, 2012). This study expanded on this theory by giving specific situational characteristics posttraining that should increase the motivation to transfer knowledge. Research in the area of training transfer is significant and the bottom line is that there are issues worth identifying in the multimillion-dollar industry that is training.

Statement of the Problem

Although there is much research available regarding training transfer, the gap in the literature pertains to the lack of employees' transferring what they have been trained on to the workplace. More precisely, what specific factors help the training transfer process? Blume, Ford, Surface, and Olenick (2019) confirmed this gap in their study by stating that further research must be done to understand influences and how they play a role in training transfer and employees' attempts at training transfer. Al-Swidi and Al Yahya (2017) also addressed the gap in the literature by addressing further research needed for the inner settings of an organization such as culture and implementing climate, which this present study also addressed by looking at goals and feedback. Another study that researched the training transfer gap in the literature is Reinhold, Gegenfurtner, and Lewalter (2018), which addressed the continued need for research to answer questions that the gap leaves. Differential influences of support and motivation for transfer are among the unanswered questions.

Previous studies have found that for training transfer, certain factors must be obtained in training, such as organizational, supervisor, peer and technical support, and workplace environment. This finding has been consistent throughout various studies on the subject such as Baldwin and Ford (1988) and Na-nan, Chaiprasit, and Pukkeeree (2017). Supervisor support has been at the forefront of research in this area. The issue with supervisor support occurs when



supervisors do not report employee difficulties to upper management, resulting in a disconnect in communication. Employees that maintain old practices after training and are not reaching their goals need to be assisted by their supervisors, and that is not happening (Suleiman, Dassanayake, & Othman, 2017). The gap in the literature speaks to the purpose of this study, which took a deeper look into supervisor support and goals associated with training.

Purpose of the Study

The purpose of this study was to determine if supervisor support, goal setting used posttraining, and/or level of experience influenced training transfer in the workplace. This study took the gap in the literature to the next level by focusing on the employee perspective in training transfer. The study tried to confirm and shed new light on the gap by getting closer to determining what specific posttraining strategies work best for training transfer. Research has suggested that training centered on the employee plays an essential role in training transfer (Nikandrou, Brinia, & Bereri, 2009). There are few studies that have taken this approach with this kind of training design. Although this study did not focus the design on the employee, it did seek the perspective of the employee on how training was perceived. Other studies suggest that for training focused on the employee, other factors for increasing training transfer include instructional strategies that must be related to transfer, be it near or far (Lim & Johnson, 2002). This study addressed this gap of goal setting. Influencing factors of training transfer include pretraining and posttraining, with more research needed on posttraining (Massenberg, Schulte, & Kauffeld, 2017). This study investigated this issue by focusing solely on the posttraining aspect of the organizational training provided. As a result, the study's significance collaborates with current research in areas that still need studying.



Significance of the Study

This study attempted to add value to the present literature on training transfer. One way was to address an issue cited in Kennedy, Chyung, Winiecki, and Brinkerhoff (2014) that posttraining evaluations for Steps 3 and 4 for Kirkpatrick's assessments were not completed by businesses. The completion of these steps was not achieved because the managers in the study did not fully understand the evaluation methodology and how to read measurements. Other reasons for these steps not being completed were the beliefs that postevaluations were not useful for the organization and that the data were not standardized enough to be compared to other functions. The study provided additional insight into the importance and benefits of posttraining strategies on training transfer. A problem that must be addressed is that many training professionals feel left out of the process of planning the strategic implementation of training. It is hoped that by showing the importance of posttraining strategies, training professionals can ultimately provide these services, giving posttraining amenities to organizations. Many changes take place for training that are not communicated to the training manager until it is time to train, when there is little to no time to absorb or prepare for the new information. Studies propose that researchers need to differentiate between the kinds of support that are given to trainees at every stage, then focus on these differences (Bhatti et al., 2013). If organizations are not going to make sure that training transfer is taking place, then training could be considered a waste of time to both the trainee and the organization (Heilmann, Bartczak, Hobbs, & Leach, 2013).

Human resources departments could use the information from this study when developing training for their staff. Human resources departments could arrange the way that competencies are organized and that have roots in the corporate system, even when employees have left the organization (Potnuru & Sahoo, 2016). These competencies could contain training,



including posttraining strategies that are focused on goal setting. The goal attainment approach is an analytical procedure for the measurement of organizational effectiveness. In this approach, an organization is described as it useful when it reaches its designated goals. This approach is applicable only when there are clear and time-bounded measurable goals and objectives (Potnuru & Sahoo, 2016). This study shed light on this organizational effectiveness by including goal settings as posttraining strategies.

Research Questions

Following are the four research questions answered by this study. These questions focused on the specific levels that may be involved in training transfer to close the gap on what specifically assists with training transfer:

- RQ1: Do the predictor variables of supervisor support, goal setting, and levels of experience collectively predict outcome scores on the Learning Transfer System Inventory?
 - H1₀: The predictor variables of supervisor support, goal setting, and levels of experience will not collectively predict outcome scores on the Learning Transfer System Inventory.
 - H1_A: The predictor variables of supervisor support, goal setting, and levels of experience will collectively predict outcome scores on the Learning Transfer System Inventory.
- RQ2: When all other predictor variables are held constant, will the variable of supervisor support show a significant contribution to the overall regression?
 - H2₀: When all other predictor variables are held constant, the variable of supervisor support will not show a significant contribution to the overall regression.
 - H2_A: When all other predictor variables are held constant, the variable of supervisor support will show a significant contribution to the overall regression.
- RQ3: When all other predictor variables are held constant, will the variable of goal setting show a significant contribution to the overall regression?



- H3₀: When all other predictor variables are held constant, the variable of goal setting will not show a significant contribution to the overall regression.
- H3_A: When all other predictor variables are held constant, the variable of goal setting will show a significant contribution to the overall regression.
- RQ4: When all other predictor variables are held constant, will the variable of level of experience show a significant contribution to the overall regression?
 - H4₀: When all other predictor variables are held constant, the variable of level of experience will not show a significant contribution to the overall regression.
 - H4_A: When all other predictor variables are held constant, the variable of level of experience will show a significant contribution to the overall regression.

Definition of Terms

Goal setting. Setting of a goal by individuals that they would like to achieve (Prince, Burns, Lu, & Winsor, 2015).

Level of experience. The number of years at a professional level. Level categories consist of nonexperienced (those who have worked in the industry for 2 years or less) and experienced (those who have worked in the industry for 2 or more years).

Supervisor support. A supervisor's provision to employees of reinforcements for transferring what was learned in training. This support could be in the form of setting goals, giving assistance, modeling trained behaviors, and providing positive reinforcement when there has been a transfer of training (Chauhan, Ghosh, Rai, & Kapoor, 2017).

Training transfer. The maintenance, use, and generalization of what was learned in training, skills, and attitudes to facilitate effective performance (Blume et al., 2019).

Research Design

This study was a quantitative nonexperimental design. This type of research method does not manipulate a treatment variable. What it does do is measure the number of variables that are believed to be meaningfully related (Warner, 2013). Multiple regression analysis uses data to test



two or more explanatory variables simultaneously (Sedgwick, 2013). Multiple regression is the most popular research method for testing interactions in management and applied psychology. Regressions are often associated with type II errors; they are prone to reporting bias, therefore, resulting in an elevated type I errors (E. O'Boyle, Banks, Carter, Walter, & Yuan, 2018). This methodology is based on social, cognitive, and goal-setting theories. This method bases itself on social cognitive and goal-setting theories, and was chosen as appropriate because an effect of one or more predictor variables (in this case, the use of goal setting in posttraining strategies and supervisor support) on a criterion variable (in this case, training transfer) and a comparison or control group implies a cause-effect design. A nonexperimental design was the best fit as there was not an accurate random assignment of groups. Multiple regression could answer the research questions that were postulated because it can determine if a predictor variable can determine the scores of one or more quantitative criterion variables. Multiple regression also allows one to determine how much effect, if any, a predictor variable has on the criterion variable (Trunk & Olsen, 2016). This method, therefore, was the ideal method for this research. It allowed one to see if there was an indication that supervisor support, goal setting, and level of experience had any effect on training transfer. This quantitative study targeted a population of adults employed full-time with no follow-up or support from a supervisor who had participated in training within the past 6 months. The predictor variable should indicate that using posttraining strategies that include both distal and proximal goals along with supervisor support increases training transfer. Nonprobability sampling using purposive (targeted) sampling was applied through online surveys that were structured.

A survey for this study was the best method that could be used. There are several reasons that a survey was appropriate in this case, including that the survey method is frequently used



when researching training transfer. For example, studies by Zumrah (2015), Bhatti et al. (2013), and Brown and McCracken (2009) all used surveys as a part of their research method when looking at different aspects of training transfer. The survey used is a model that has been used for several decades in research. Surveys allow researchers to reach a large sample size in a minimal amount of time (De Haan & Nilsson, 2017).

Assumptions and Limitations

It is important to address with any research design, certain assumptions and limitations accompany the research. The assumptions will be outlined and explained in relationship to this study. A discussion of the limitations will follow.

Assumptions

Training programs are intended to provide trainees with the knowledge and skills that should be applied in their workplace. The assumption of these training programs is that once the trainee has acquired knowledge and skills, training transfer will occur. Training transfer can be minimal if the training program does not include activities similar to trainees' actual job tasks and duties (Diamantidis & Chatzoglou, 2014). In this situation, the degree of training transfer could be minimal and, regardless of variables used, could be analyzed as insignificant or not occurring at all (Çokluk, 2010). Several assumptions were made with this study that required identification after the onset of training. Supervisor support in the workplace is a concept that many researchers have studied to see what if any impact it has on training transfer. An assumption for this study was that the more support received from the supervisor by the employee, the more training transfer will occur.

Another assumption was that goal setting would be a factor that would increase training transfer as well. Goal setting allows individuals to reach goals that they set for themselves



(Johnson, Garrison, Hernez-Broome, Fleenor, & Steed, 2012). Therefore, ensuring that an employee has goals will facilitate transfer. Goal-setting theory centers on the concept that conscious goals affect action. The focus of goal-setting theory is on the core properties of a practical goal. This theory is for not only the individual but also the organization as a whole. Organizational goals should connect to training offered to the employee (Curado et al., 2015), working into the assumption that if goals are set, transfer will come more easily.

Additionally, there was an assumption that level of experience would have an effect on training transfer. Level of experience can be a benefit. Menekse Dalveren and Cagiltay (2018) found that those that have experience tend to gather the necessary information faster. With experience, the ability to distinguish information also develops, therefore, making training more relevant to them faster and increasing training transfer. This theory aligns itself with setting goals. The theory is often used when describing the effort that individuals will make to reach a goal (Baumann & Bonner, 2017). Expectancy theory looks at the cognitive processes concerning choice or choosing. It describes the procedures that a person follows in making a choice. Individuals combine their needs with their beliefs and expectations of the chances of success (Barba-Sánchez & Atienza-Sahuquillo, 2017). Much like goal-setting theory, expectancy theory states that a higher expectancy of performance effectiveness is more motivating than a lower expectancy (Barba-Sánchez & Atienza-Sahuquillo, 2017).

Ontological assumptions. Ontological assumptions involve an individual's perception of reality, and what truly exists (Gopinath, 2015). The ontological assumption that is made for this research that is training transfer can be observed and measured. This study used the Learning Transfer System Inventory to measure training transfer.



Epistemological assumptions. Epistemological assumptions refer to knowledge and how an individual acquires it. Generally, individuals generate knowledge in one of two ways, inductive or deductive (Gopinath, 2015). The approach of this study was a deductive one. The assumption is that there is a variety of variables that could have contributed to training transfer. The study will bring prior knowledge from past research variables and training transfer.

Axiological assumptions. Axiological assumptions state what is considered valuable and essential in research (Zieliński, 2018). Statistical information was gathered for the variable of total training transfer (supervisor support, goal setting, and levels of experience). This provided objective data regarding the outcomes.

Generalization. General assumptions for this study were inherent. This study assumed that the participants of this study answered the questions provided in the survey honestly. Response bias has been documented in many fields of behavioral research where self-reported data are used (Rosenman, Tennekoon, & Hill, 2011). The assumption is that the individuals who volunteered to participate in this study did so because they were genially interested in the study and not for other motives.

Causality. The causality assumption related to causality for this study was that multiple regression will generate a prediction for how the variables of supervisor support, goal setting, and level of experience account for training transfer. Several different variables can cause training transfer, this study focuses on three of them. Therefore, other possible variables that were not in this present study need further consideration.

Logic. The logical assumption of this study involved the deductive nature of confirming or rejecting theory-driven hypotheses to answer research questions (Weaver & Olsen, 2066). It was assumed that the reality of training transfer could be statistically measured and analyzed by



performing statistical analysis. This study used regression analysis to determine statistically significant relationships for training transfer.

Limitations

There were limitations for this study. One limitation was that a small sample was pulled from those in the retail industry, and no other area of employment was included. This study did not consider a cross-reference of multiple training settings. Subjects sought after for this study were from different organizations, and there was no focus on one organization and how it may or may not be doing things for training. The survey was self-administered and self-evaluated, and there was no information collected pretraining or during the training. Using a self-administered survey could have caused biases and exaggerations by the subjects related to training transfer. The nonexperimental design of this study did not lend itself to consider causal inferences. With all these limitations, this study adds unique training transfer predictors to the existing current literature. There are times that multiple regression analysis is not sufficient for understanding if there is in fact significance in the data. If looking for statistical significance with interactions, as was not the case in this study, it may be beneficial to test the specific form of the interaction. For example, a follow-up analysis in the form of a slope test could add insight to the original data obtained (Lee, Lei, & Brody, 2015).

Na-nan et al. (2017) determined that a limitation of their study was using business school students and future research would benefit from a larger sample. Other researchers such as Capaldo, Depolo, Rippa, and Schiattone (2017) stated that more was needed for integrating an organization's goals into training needs and outcomes. Implementing the distal and proximal component into this study was an attempt to take the next steps in closing these gaps.

Delimitations for this study included the perspective of the supervisor or any upper management



employee. Other intentional areas not investigated were any pretraining factors and actual training settings. Regressions are often associated with type II errors; they are prone to reporting bias, resulting in elevated type I errors (O'Boyle et al., 2018). The difficulty of evaluating training transfer specifically in sales is that sales are what is called a *simple service*. In other words, sales trainees and managers find it challenging to objectively evaluate even after training completion (Honeycutt, Hodge, & Attia, 2015).

Organization of the Remainder of the Study

This research paper contains five chapters. Chapter 1 discussed the background of the problem, purpose and significance of the study, research questions and design, and assumptions and limitations of the study. The next chapter consists of the literature review for this study, which includes theoretical orientation, synthesis of the research findings, and a critique of the previous methods used in similar studies. Chapter 3 covers the methodology. This chapter reviews the purpose of the study, research questions and hypotheses, and research design. Also discussed are the target population and sample used, procedures, instruments, and ethical considerations. Chapter 4 goes into the results obtained from the study. The chapter goes into detail about the description of the sample and hypothesis testing. The final chapter, Chapter 5, includes discussion, implications, and recommendations of the study. Analysis of the study results and conclusions based on the results concludes the discussion. Limitations of the study along with suggestions for practice, recommendations for further research, and conclusions make up the final chapter.



CHAPTER 2. LITERATURE REVIEW

The purpose of this study was to answer four specific research questions. The literature review was conducted to determine if there were any gaps in the previous research regarding training transfer and supervisor support, goal setting, and level of experience. The literature review was piloted to identify the theoretical frameworks for the study, expectancy theory and goal-setting theory. Finally, the literature review was conducted to find previous research regarding the role of the supervisor, goal setting, and level of experience in supporting the transfer of training. The literature review highlights the influencing factors on training transfer, such as supervisor support, goal setting, and level of experience. It provides information on several significant factors that play a role in training transfer as well as on factors that may hinder the transfer of training. The literature review also emphasizes the amount of money that is spent yearly on training. It can be seen that organizations do have a goal of making their companies competitive and relevant through training. Discussed in the literature review is the theoretical framework that encompassed the study, a synthesis of the research findings, and a critique of previous research methods. The outcome of the literature review relied on the search methods used to get the information from scholarly literature. There was a direct impact on the literature review by the key terms that were used to search. The following section gives additional details on the search terms and methods used.

Methods of Searching

There were several procedures used to find sources for the literature review for this study.

All sources used for this study are all scholarly reviewed. The Capella University library was used to conduct various searches. Business Source Complete, PsycArticles, PsycInfo, and Google Scholar databases were used to locate sources that were not available within the Capella



University library. Summon was the search engine used for searches within ProQuest and the EBSCO database. Capella University dissertations were used for mining reference lists.

The following search terms were used in order to obtain information on training transfer:

(a) training transfer, (b) transfer of training, (c) supervisor support for the transfer of training,

(d) leader support for the transfer of training, (e) level of experience for the transfer of training,

(f) goals for the transfer of training, (g) expectancy theory for the transfer of training, (h) goalsetting theory for the transfer of training, and (i) organizations committed to training. The
searched articles were mostly from the last 5 years of research, with certain articles being over

40 years old.

Theoretical Orientation for the Study

This study looked at the importance of training transfer from the employee perspective and for the organization. Goal-setting theory is one of two theories that served as the lens for this study, the other being expectancy theory. Goal-setting theory is one of the essential theories among 73 organizational behavior theories, according to organizational behaviorists (Neubert & Dyck, 2016). Goal-setting theory centers on the concept that conscious goals affect action. The focus of goal-setting theory is on the core properties of a practical goal (Dewettinck & Van Dijk, 2013). The features of goal-setting theory were developed to explain how performance goals affect task performance and consider performance goals as a determining factor. Completion of the task is a determining factor. More specifically, goal specificity and goal difficulty are the core elements of goal setting theory, and have been found to positively affect performance (Dewettinck & Van Dijk, 2013). This theory states that a goal that is specific and challenging can increase employee performance in contrast to having a vague goal, described as doing the best



that one can (Brown & Warren, 2009). There are different kinds of goals that employees can have in order for them to succeed at the task at hand.

In outcome goals, employees are encouraged to achieve superior outcomes (Brown & Warren, 2009; Shantz & Latham, 2012). Organizational goals should connect to training offered to the employee. Learning that takes place in the workplace regarding training is what is defined as acquiring, using, and critically reflecting knowledge to achieve organizational goals (Curado et al., 2015). Goal-setting theory ties into feedback at work, whereas feedback is essential at the employee level as well as supervisor level. Feedback from all levels creates a better rounded perspective that can be ideal in closing the gap that exists in training transfer. More efficient and appropriate input of results assists the employee in achieving to higher performance behavior than with an absence of feedback. Feedback is a way of making clarifications and adaptations to a goal when there are difficulties. Feedback helps employees to work with more involvement and leads to higher job satisfaction (Koltko-Rivera, 2006). In addition to feedback, goals that are created with learning gains in mind are helpful (Gardner et al., 2016).

Gardner et al. (2016) used goal-setting theory in their study. Their study found that the presence of goals can lead to higher task performance than with the presence of a vague goal. The results suggest that implementing goals that focus on creating successful strategies and process learning gains is difficult when trainees do not possess the knowledge or skill to perform the task efficiently. Their findings also suggest that empowering trainees by teaching them when to set specific learning goals versus when to set specific performance goals can increase performance. Vahidnia and Fatemi (2015) used goal setting theory in their study. Goal setting is assumed to be a critical component of motivation and learning and is thought to be a useful strategy for improving motivation. Also, their study advised that goal-setting theory holds first



rank in validity and second rank in efficacy in comparison with other motivational strategies. Another study that used goal-setting theory was I. O'Boyle and Cummins's (2013), which suggested that the final part of an efficient goal-setting process is individuals' receiving sufficient feedback from management on their progress about the achievement of their required objectives. Decisions on goals and objectives have a direct association with employees' behavior and performance and how difficult or easy it may be to achieve those goals and objective. Although goal-setting theory encompasses training transfer, it is not the only theory to do so. Expectancy theory, in a similar way, embraces training transfer as well.

Expectancy theory was the other lens through which training transfer was considered in this study. Expectancy theory posits that motivation increases to the extent that individual experiences enhance expectancy and instrumentality along with valence for job-related outcomes (Lambright, 2010). This study illustrated how posttraining can tie into organizational goals and assist with clearly set goals needed to attain the transfer of knowledge. Expectancy theory states that an individual's motivation determines three things: expectancy, instrumentality, and valence. This theory encompasses the idea of expectation. Individuals' motivation rests on the belief that they can perform, with enough effort, to the expectation of their supervisor. Instrumentality is the relationship between an individual's performance and the outcome (Baumann & Bonner, 2017). In the case of this study, training transfer was the focus. The instrument used was the Learning Transfer System Inventory (LTSI; Holton, Bates, & Ruona, 2000); this instrument looks at training transfer outcomes. Much like goal-setting theory, expectancy theory plays its role with the involvement of the supervisor or manager. Training transfer involves the set of beliefs that employees have for themselves as well as the belief that their supervisor has in them. Valence, then, is individuals' motivation to positively value the results that they believe they will receive



for their performance (Lambright, 2010). Expectancy theory assesses individuals' belief that they can perform at a level that would allow them to complete a task; this knowledge motivates them in the task. The expectancy is that the individuals will choose to attempt to transfer what they were trained on (Baumann & Bonner, 2017). Observation of expectancy theory is in almost all aspects of the employment relationship. The theory states that employees' tendency to perform a job task is at a level that is equal to the type of response they expect from their employer. Expectancy theory is manifested in recruitment and selection, interviewing, and employee performance (Koltko-Rivera, 2006). Motivation is a critical component of this theory.

Therefore, expectancy theory is one that focuses on behavioral choice and motivation. This theory aligns itself with setting goals. As stated, this theory has been used to describe the effort that individuals will exert to reach a goal (Baumann & Bonner, 2017). Current research uses expectancy theory as the framework when looking at an individual's motivation and ability, and to determine the motivation of an individual to complete the task at hand. Expectancy theory looks at the cognitive processes regarding choice or choosing and describes the processes that a person undergoes in making a choice. In a given situation, therefore, individuals combine their needs with their beliefs and expectations of the chances of success (Barba-Sánchez & Atienza-Sahuquillo, 2017). Many studies have identified expectancy theory as their framework.

Expectancy theory has been a lens for many studies regarding training transfer. Clasen (1997) used expectancy theory as the framework for their study on predicting training transfer skills. Expectancy theory was used in another study, by Khan and Nazir (2017), that looked at personality traits and their effects on training transfer. The study used the theory as the framework for an approach to learning motivation (Khan & Nazir, 2017). Arasanmi, Wang, and Singh (2017) also used the expectancy theory in their study on motivators of training transfer.



Expectancy theory was one of the three theories used in their study. It was, however, stated that the expectancy theory was not as good of a fit as was the other identified theories for motivation to transfer. Although both goal-setting theory and expectancy theories present a framework for training transfer, how they focus on transfer differs slightly. Despite all of the information provided by these theories, there is still more to training transfer.

Review of the Literature

The topic of training and training transfer has been extensively researched in the past decades. This study looked at the training transfer as the criterion variable. Goal setting, supervisor support, and level of experience are all predictor variables in this study. Goals along with supervisor support and level of experience of the employee all affect in some way training transfer. What is missing from research on training transfer is the specifics of what would benefit training transfer as general information is already known. The review of the literature takes past research and looks at training, training transfer, goal setting, supervisor support, and level of experience. The review of the literature also takes past findings and looks at previous research methods, considering the strengths and weaknesses of the studies and synthesizing the information. Because there has been much research in the areas of training, training transfer, motivation to transfer, and supervisor support in the training process, this chapter provides a foundation for information from research past and establishes where this study fits into the knowledge base and where it can add to it. The literature review assists in justifying the research that was conducted in this study.

Training program evaluations are an essential and culminating phase in analysis, design, development, implementation, and evaluation of a process. However, assessment has often been overlooked or not implemented to its full capacity or at all (Sahoo & Mishra, 2017; Wang &



Wilcox, 2006). Training has been a desired topic of research and debate for decades (Yang, 2016). Times have changed, and with the modern world comes transformation that also means a change in the way that organizations approach training. Research has stated that training efforts are unlikely to result in positive changes in job performance unless the newly trained competencies transfer to the work environment (Velada, Caetano, Michel, Lyons, & Kavanagh, 2007). Training is the key element to an organization's innovation and attempts to stay current in their field. Continuous training will help employees stay current, be innovative, and become experts in their field (Dostie, 2018). Dostie (2018) found that the workplaces that offered some training, be it on-the-job or classroom, saw a product innovation of 39%, whereas those workplaces that did not offer training saw product innovation of 22%. Although there has been much research on the topic of training, there are still some gaps in the literature. There can be more efficient ways in which to provide training that is effective in which transfer to the workplace occurs for employees. The issue with training is that training alone does not guarantee training transfer; therefore, other aspects of training must be researched (Friedman & Ronen, 2015).

The American Society of Training and Development estimated that employers spent \$156.2 billion on employee learning in 2011 (Towler, Watson, & Surface, 2014). That number jumped in 2015, when it was reported that U.S. corporations spent \$356 billion on training without improvements in corporate performance (Beer, Finnström, & Schrader, 2016). There is a large number designated for training in the area of sales. According to the *Training Industry Report*, in 2011, 25% of the allotted \$60 billion went to worker sales training (Honeycutt et al., 2015). One third of companies allocate \$2,500 or more each year to assist sales representatives in helping them reach higher sales quotas, which will profit their company (Honeycutt et al., 2015).



This information is all significant because there are billions of dollars used for training, and yet there is a gap in the literature specifically regarding training transfer (Grohmann & Kauffeld, 2013). The cost of training is for approximately 20 million Americans that work in the sales industry in many forms (Fu, 2015). These costs become difficult during economic hardships, when companies need to provide a rationale for the training provided. Providing a return on investment has consistently been an issue for sales managers and trainers. There is a gap that goes hand in hand with the gap discussed in this study: there is inadequate training regarding competencies and expertise to make employees successful in their roles (Lassk, Ingram, Kraus, & Mascio, 2012). The stated gaps in the different areas of training in sales contribute to the training transfer gap in the sales and retail industry.

In an attempt to minimize the gap, research has looked into pretraining, during training, and posttraining strategies that may assist in making training more productive (Dermol & Cater, 2013). The most-used model for training has been Kirkpatrick's four-step model (Kirkpatrick Partners, 2017). This model covers reactions, learning, behaviors, and results (Lin, Chen, & Chuang, 2011). Kirkpatrick's model of training evaluation is divided into four sections. The first section is a reaction and refers to how favorably learners react to instruction in the training taking place. The second section is learning and refers to how well learners acquire the knowledge or skills imparted during training. The third section is behavior and refers to at which level learners apply the new knowledge or skills in their on-the-job actions; this step refers to the transfer process (Tan & Newman, 2013). The fourth and final section is results and refers to the extent the instruction accomplishes the intended impact on workplace outcomes (Kennedy et al., 2014). Research also shows that organizations tend to overlook Steps 3 and 4 of Kirkpatrick's model, and for training to be successful, all training sections must be evaluated (La Duke, 2017). The



return on investment model has much in common with Kirkpatrick's model. The focus of this model is to define the financial worth of investment in training.

The first level of the return on investment model and Kirkpatrick's model are similar. The return on investment model's first level is a reaction and planned action, or how trainees react to training and how they plan to use the material in training. The second level is learning, or how skills, knowledge, and attitude have changed after training. The third level is job application, or training transfer. The fourth level is business results, or how the training has led to tangible results. The fifth and final level is the return on investment, or how the monetary value of training exceeded the training program (Sahoo & Mishra, 2017). The CIRO model (context, input, reaction, and outcome) is another model that assesses training. In the CIRO model, the context phase focuses mainly on three stages: ultimate, intermediate, and immediate. The input phase focuses on the training itself—for example, the design, planning, delivery, and management of training provided. The reaction phase looks at the satisfaction of trainees with the training program. Finally, the outcome phase focuses on measurement of the results of the training.

Another model that is available for training assessment is the CAIPO model (context, administration, inputs, process, and outcomes), which was developed in 1986 by Easterby-Smith (Easterby-Smith, 1994). The training assessment of the context phase looks at things such as if the workspace supports the training. Its overall main focus is on pretraining and posttraining strategies. Pretraining strategies include a briefing of training and selection. Follow-up in the form of posttraining evaluations and experience shared by the trainees is an excellent way to assess the training (Sahoo & Mishra, 2017). As shown, there are several different training



assessments. Most of the assessments are challenging to follow, resulting in inappropriate evaluation and the lack of a link between training and results (Spitzer & Conway, 2002).

Organizations look at the return on investment of training programs in terms of what is taught and not the actual performance because of cost. Evaluating training costs money, and organizations do not want to pay only to continuously have inadequate training or a lack of experience on their team or the tools needed for training (Kumar, Narayana, & Sagar, 2012). Companies can increase their revenue by adequately training their employees. Organizations can make up what they spend in training annually and exceed the cost with the proper training and a high transfer rate. One way that organizations can ensure that this happens is by having a suitable evaluation method of their training (Noe, 2010). Evaluation of a program consists of collecting data in order to measure the impact that training has had on an organization (Rahimiæ & Vuk, 2005). The organization needs to know if the training met all of the organization's objectives and goals (Perez-Soltero et al. 2019).

Training evaluation is an essential part of the training process and affects everything down to training transfer. According to Perez-Soltero et al. (2019), there are several motivators for evaluating training. There are four researchers with a take on what motivates evaluation of training. Kirkpatrick and Kirkpatrick (2009) stated that evaluation of training assists with the determination of if a program should continue. It also defines any improvements that must be made to a program to maximize the training effects. A training evaluation also looks to see if an organization's goals coincide with the training. Griffin (2012) used training evaluation as a way to be able to justify the amount of money, time, and personnel allotted for the training. This evaluation process also looks at ways to improve the training and studies on how those improvements can improve trainees' skills and knowledge acquired. An organization can



evaluate if the training provided was appropriate for the organization's needs. Kumar et al. (2012) discussed the evaluation needed in order to assess the strengths and weaknesses of a program. This evaluation process puts more emphasis on employees as it seeks to find if employees got all that they could from the training. It also calls for reinforcement of the main points of the training with employees. In this process, evaluation assists in ways that it can market training in the future.

Prasad, Vaidya, and Kumar (2016) had the shortest evaluation criteria, which include identifying ways to improve a training program, determining if training aligns with an organization's goals, and understanding the real value of the training provided. Training can take place in a couple of ways: distance and online, or traditional face-to-face. Much like in face-to-face training settings, many factors come into play when looking at a distance learning scenario. Some say that if training transfer does not occur in a specific amount of time, there are flaws in the training. Such training can be considered a waste of time and funds, not adding value and being inoperable. As stated throughout this study, many factors can contribute to training transfer or lack thereof. Although training design is one of those factors, it is not the only factor taken into consideration (Aluko, 2014). For this study, supervisor support, which is said to be the gateway for training transfer, proximal and distal goals, as well as level of experience were the factors looked at individually for training transfer.

It is, then, not a surprise that between 35% and 76% of large firms assess at least one level of sales training, and a majority do not measure training effectiveness against sales volume, sales personnel performance, or other bottom-line metrics (Tan & Newman, 2013). Studies in various industries, including banking and health care, have confirmed the importance of sales training. This training has been deemed essential because, to improve sales force productivity,



firms annually invest 1.5 billion work hours to their training efforts (Tan & Newman, 2013). Even though billions are spent on training and hours worked on sales and retail training, the effectiveness of these training efforts is not often evaluated. A reported 80% of companies do not measure their return on investment regarding its training efforts (Tan & Newman, 2013). Although all of these managers have reported that their sales training programs fail to make a lasting, visible impact on overall sales figures (Tan & Newman, 2013), it is essential to reference any similarities and differences between general learning and learning in training.

Formal education is not sufficient for reliable training transfer. Consequently, formal learning alone is perhaps not the most efficient way to accomplish behavioral changes. Informal learning provides the individual with opportunities to practice what was learned from formal training in everyday workplace situations. Learning at work is different from learning at school such that learning at school is more structured and planned intentionally. Learning at work is, therefore, informal in comparison. Learning can benefit from a combination of formal training with informal learning at the workplace. Formal training supports only individual knowledge transfer and lacks the benefits of learning from social interaction (Spaan et al., 2016). A limitation that has come up in studies about training is that when studies have been done on the topic, it has usually been in laboratory settings and not in a real-world setting (Rahyuda et al., 2014). This study surveyed participants in a real-world training setting. Usually, studies have settings designated for study purposes only. There are many things to consider regarding training and factors that must be implemented in order to be able to transfer training into the workplace successfully.

The subject of training has been researched, and as a result, there are various forms in which training happens. A study by Lakra (2016) discussed a five-step process of training. The



event that begins the process is when the organization does not perform up to expected standards; this is the catalyst for training (Blanchard & Thacker, 2007). The needs assessment follows; overlooking this crucial step is not ideal (Roberts, 2006). A needs assessment allows organizational goals to be determined, as a needs assessment determines why training is needed. Addressing the training requirements of an organization can be assessed with a threefold approach. The first approach is organizational analysis; this seeks what department within the organization on which training emphasis should be. The second training requirement is operations analysis. Operations analysis determines how training will assist employees with being effective in performing their job. Finally, person analysis concludes what specific skills and knowledge gains employees need to develop in order to contribute to the organization successfully. The second phase of training involves the design of the training. In this phase, training objectives are developed and establish the specifics of the content of the training. The third phase of training is the development phase. In this phase, training materials, content, instructional methods, and manuals are developed in line with the training objectives. The fourth phase is the implementation phase, in which everything comes together in the training sessions. The fifth and final phase is evaluation. The evaluation phase looks at the training and how objectives were addressed. This phase addresses how the trainer conveyed the training points and how employees were affected by the training (Lakra, 2016).

Just as there are numerous ways to implement training, there are also several ways in which to evaluate a training program. Training evaluation affects everything, including training transfer. Formative evaluation is a type of training evaluation that hones explicitly in on information about the training itself and which methods and forms the training uses. This kind of evaluation allows the evaluator to see who needs improvement in the process. Summative



evaluation focuses on training transfer and its impact and direct effects related to training. This evaluation is attentive to training results, the impact on the organization based on trainee learning. It also investigates what the cost–benefit ratio of the training is on the company and whether it is practical to spend what was spent on the training program. Confirmative evaluation looks at training transfer in the form of the skills and knowledge that were acquired by trainees and the success of their implementing those skills and knowledge. In order to assess that information, several aspects are looked at, such as a change in behavior, if goals were met, and if, in fact, trainees assimilated the skills and knowledge that were provided in training.

Metaevaluation is very similar to formative evaluation, but method, validity, and acceptability of the program are at its center. The evaluation process itself is validated along with any output of results. Goal-based evaluation determines if the training program has met the goals that were established by the organization. The program's effectiveness and progress in trainces' accomplishing their goals are at the forefront of this evaluation method. Process-based evaluation evaluates the process by which the training happens; this facilitates decisions on whether the training program should continue. The process of training as well as the needs within the organization's ability to perform are the core of this evaluation process. Finally, outcome-based evaluation evaluates the results of training and looks into whether it would benefit the company to continue with the training. The effectiveness and efficiency of a training program are what is investigated with this evaluation (Perez-Soltero et al., 2019).

Training Transfer

Training transfer is a central issue in human resources development (Burke & Hutchins, 2007). The most cited model in training transfer literature is Baldwin and Ford's 1988 model, which identifies three sources of influence: characteristics of the trainee, characteristics of the



training design, and work environment characteristics (Blume, Ford, Baldwin, & Huang, 2010). Numerous research studies by Ford and Weissbein (1997), Burke and Hutchins (2007), Baldwin, Ford, and Blume (2009), and Grossman and Salas (2011) have made the subject of training transfer one of the most active areas in training research. In addition to this research, Holton, Bates, and Ruona's 2000 research by way of the LTSI model has added tremendous value in the transfer of training literature. Training is considered to be essential in the development of its employees and in their staying current in and abreast of industry trends. The other side of training is cost. Many organizations rely on training for individual growth and job competence as well as organizational success. Organizations need to understand what factors positively influence training transfer.

There is evidence in the research that social support and motivation to transfer knowledge are positively related to training transfer. This correlation is made after team training interventions that include individual and team levels of analysis are addressed (Massenberg, Spurk, & Kauffeld, 2015). Employees seem to use knowledge, skills, and attitudes from corporate training programs to an insufficient extent in their workplace settings (Nijman, Nijhof, Wognum, & Veldkamp, 2006). The question of how to ensure that service quality training programs lead to better service performance has not yet been analyzed sufficiently. The result that, in general, trainees only apply about 10% to 30% of the training content draws particular attention to the importance of monitoring and evaluating the transfer process (Cromwell & Kolb, 2004; Liebermann & Hoffmann, 2008; Lim & Morris, 2006). The main tangible and practical problems of training transfer seem to be the effectiveness and efficiency of the training. One of the challenges of training transfer is that participants forget what they have learned in training (Alshaali, Hamid, & Al-Ansi, 2018). Research has shown that all kinds of learned knowledge



and skills are usually forgotten, either gradually or rapidly, after the learning activity (Custers, 2010; Jaber & Sikström, 2004; Mozer & Lindsey, 2016; Ritter, Baxter, Kim, & Srinivasmurthy, 2011). Researchers have estimated that approximately 40% of training content is transferred immediately after training, 25% of that is retained after 6 months, and 10%–15% is retained after 1 year (Baldwin & Ford, 1988; Wexley & Latham, 2002).

There are many factors to be considered regarding training transfer and many individuals that need to play their part for it to be successful. Trainers should train supervisors about how to support trainees during and after training. Employers are advised to keep assisting trainees during and after training and respond to their need for support. Employers should ideally be informed on what to do by the trainer and managers who have set the training in motion on behalf of the organization. Supervisors should identify any organizational reasons behind failure to apply what was learned in training. By doing so, organizations and supervisors will be able to facilitate trainees' transfer (Pham, Segers, & Gijselaers, 2013).

Giving employees this support will assist in changing the climate of the workplace towards one of continued learning. This change in culture will have a positive impact on posttraining behaviors; supervisor support also indicates an increase in training transfer (Velada et al., 2007). Participating in posttraining strategies, supervisors should engage employees in training transfer with a change in culture in the work environment. Participants have been asked in studies to report the behaviors that they found to be helpful and unhelpful in training transfer. Results suggest the importance of three factors in facilitating the transfer. One element is the support provided by supervisors before, during, and after training (Lancaster et al., 2013). The documentation implies that various concerns in the work environment, such as safety, can affect organizational behavior, including training transfer. There are aspects of psychological climates



that are thought to operate by setting norms and expectations for associated behavior. These standards are applied by management and taught to new hires. Transfer climate is said to have a direct influence on training transfer, as do managerial and technological support (Strickland, Santiago, Fuller, & Dueñas, 2013).

Studies in training transfer research are mainly concerned with the examination of specific interventions that must be implemented to help trainees apply their newly learned skills to the workplace—that is, posttraining transfer interventions (Rahyuda et al., 2014).

Organizations have ways that they can facilitate training transfer. One way is giving employees the capability to transfer what was in their training. An organization can also facilitate the transfer of training by reinforcing employees' belief that they can transfer what they have learned. Information provided in training can be checked to see if the trainees retained it. An organization can provide appropriate feedback on employee job performance following the training with an evaluation (Velada et al., 2007).

It is helpful if there are evaluations at every step of the training process. This study focused on posttraining strategies only, but a full evaluation would include pretraining, during training, and posttraining strategies. Pretraining strategies include aspects such as assessing what knowledge trainees have before attending the training and what, if any, expectations they have of the training. During the training, process trainers can assess if the participants understand the material. This training process could also be an opportunity for improvement of the trainees and the training itself. When posting training strategies, several timelines can be put in place.

Immediately after the training course, it is good to measure the immediate impact of the training (Perez-Soltero et al., 2019). For example, capturing the reaction and satisfaction of trainees regarding the training and perception of the program can be a helpful measure. Thirty to 90 days



after the training has taken place is a good time for an assessment that shows any evidence that training transfer has occurred. More than 90 days after training has taken place, training transfer evidence can be sought after as well as return on investment from the training and how training transfer within the organization has met expectations (Perez-Soltero et al., 2019). Even if trainees are satisfied with the training, that does not mean that the skills that were taught had an organizational impact through training transfer (Blume et al., 2010). Understanding and participating in the training evaluation process allows an organization to hone in on any issues that may hinder transfer. Training evaluations comprise the data collection process that analyzes if the training was effective and what must be changed in order to obtain maximum benefit via training transfer (Rahimiæ & Vuk, 2005).

In addition to needs evaluations for training, it is also best practice for organizations to conduct a developmental needs awareness evaluation (Ellinger, Ellinger, & Keller, 2005; MacNeil, 2004). This type of evaluation identifies the individual needs of developing skills, knowledge, and abilities both within and beyond the organization. Developmental needs awareness can be harnessed through self-assessments, job rotations, training, and opportunities for promotion (Park, Kang, & Kim, 2018). Studies have found that organizations that participate in developmental needs awareness evaluations are able to find the gap between their current skill and knowledge level and the level that is needed (Chen, Chang, & Yeh, 2004; Ismail et al., 2010; Noe & Wilk, 1993). This evaluation allows for organizations to be proactive and have the information necessary to close the gaps. It is also eye-opening for employees to be able to see what they lack, which can encourage them to make the necessary changes to be up to par with the skills and knowledge that they need. Research indicates that the more that individuals participate in developmental needs evaluation, the more likely they will be to successfully



transfer what they have learned to the workplace. In other words, employees that are able to self-identify their needs for development have a positive correlation with higher job performance and training transfer (Chen et al., 2004; Jiang & Klein, 2000).

Training evaluation specifically in the area of sales was the focus of a study by Honeycutt et al. (2015). In their study, they were able to document some challenges faced in collecting data via evaluations. These challenges are important because they allow others to see what areas need improvement within their organizations. Some challenges faced when trying to collect data via evaluations included employees' resigning and going to work for a competitor, areas of the company in which there is no historical data, and employees' not being a formal coordinator between the trainer and company. Other challenges included the amount of data needed being a burden for the sales supervisor to obtain, day-to-day business being a priority over training, and company salespeople being too busy managing sales territories. Each of these challenges can have a valid solution; the issue may sometimes be managerial attitudes and evaluation restrictions (Attia, Honeycutt, & Attia, 2002).

Because this study focused specifically on those in the sales and retail industry, training content must be a consideration. Sales training content is changing the salesperson role, looking at ways that the salesperson can resolve consumer issues and complete the sale. Changing the role of the salesperson is a current challenge in sales training. For example, the goal is to train the salesperson to be more customer oriented in their sales approach as well as play an increased service role. Lassk et al.'s (2012) study included increased accountability for the salesperson, enhanced technology capabilities via social media for increased sales, and cultural diversity issues. Sales training evaluation should include measurement of the training in order to



determine its effectiveness. Potential gaps in skills that must be acquired should also be considered in a sales training evaluation (Lassk et al., 2012).

When one thinks of sales, the mind may go to a specific good being sold or offered. Although that is part of sales, it is not the whole picture. Sales training is considered by research to be an intangible concept. Certain things such as role-playing, interactions, employee expertise, and attitude are crucial elements in sales training, but they are difficult to assess accurately after training. An area that is unable to be assessed with training is the interaction that the consumer has with the salesperson, which has some bearing on how a sale may go (Honeycutt et al., 2015). The Association for Talent Development has taken a more progressive approach to sales training. Their training strategies go beyond addressing task-related knowledge and skills and move toward a more continual learning process. The training model that the Association for Talent Development has created pulls from decades of prior sales training research. In order for the implementation of the model to be successful, salespeople and sales managers must have excellent interpersonal skills with others within their organization (Lassk et al., 2012).

What, then, constitutes what training transfer is? An organization has to look at how continuous and whether implementation has taken place in workplace training (Broad & Newstrom, 1992). New situations must be looked at and analyzed to see if employees were able to implement their learned skills in a new way (Haskell, 2001). Time is needed to determine if learned skills and behaviors are transferred over a certain time (Cheng & Ho, 2001).

Organizations also need to assess if there was an application of the training's skills and knowledge to the workplace (Broad, 2008). All of these actions look at performance, which is the essence of training transfer. Organizations can increase their performance if the training they offer links to their performance goals. Employees' career goals are an essential aspect of training



transfer. For employees, a raise in salary, a promotion, or new work endeavors can play a role in training transfer. Studies show that there is a positive correlation between career advancement and training transfer (Ascher, 2013).

Goal Setting

Goals allow for an individual to assess how they would like to act. Setting goals increases planned behavior, which sets into motion the action necessary to reach a goal (Johnson et al., 2012). Setting goals has been said to increase training transfer as it assists self-regulatory behaviors such as setting certain standards, self-monitoring, self-evaluations, and self-reflection. Goal setting has, then, been an intervention used in order to increase training transfer. Setting goals in a training environment is not a foreign concept. The issue appears to be deciphering which types of goals increase training transfer (Rahyuda et al., 2014). The presence of specific goals leads to higher task performance than does the presence of vague goals, such as distal goals. Goal-setting theory identifies if trainees' goal orientations have an impact on the assigned goal–performance relationship (Gardner et al., 2016).

Goal setting deals with identifying a set of specific and challenging goals to help individuals with expressing attention, organizing effort, increasing determination, motivating strategy development, and—therefore—improving overall performance. Goal setting is characterized by three essential elements: specific, challenging, and difficult. The goal must be focused, clear, and achievable within a particular time frame. Challenging consists of the goal being challenging and stimulating individuals' motivation. Demanding entails the goal being challenging but realistic so individuals can have the enthusiasm to reach the goal. It is argued that setting specific and challenging goals may lead trainees to positive training transfer.

Research points out that the higher the level of intent, the higher the level of transfer.



Researchers have discussed several types of goal setting—namely, assigned, learning, outcome, distal, and proximal plus distal, or doing the best that one can (Rahyuda et al., 2014). The impact of individual goals on teamwork, however, is less known. Researchers have suggested that personal goals may direct attention away from strategies that would facilitate team performance.

Studies show that goal setting can have a compelling impact during the post simulation debriefing process (Gardner, Kosemund, Hogg, Heymann, & Martinez, 2017). The final part of an efficient goal-setting method is that individuals receive adequate feedback from management on their progress toward the achievement of the required objectives (I. O'Boyle & Cummins, 2013). Goal specificity and goal difficulty are the core elements of goal-setting theory and in particular have been found to positively affect performance (Dewettinck & Van Dijk, 2013). Studies have mainly been conducted with no control group, including not setting goals. Brown and Warren (2014) suggested that for future research, control groups should be included that do not set goals of any kind to see if their results vary. Because this study focused on examining the effectiveness of goal-setting interventions in training transfer, a control group with no goalsetting interventions is possible. Ashurst (2014) suggested that it is essential to evaluate all training on the day it is delivered and then reviewed again after 6 months. This, if done correctly by the supervisor, would be a posttraining strategy that reaches out to employees with set goals and follows up on the status of those goals. Managers should cultivate an innovative climate and obtain employees' buy-in about the implementation of various learning practices and programs (Sung & Choi, 2014). The construct definition for the posttraining strategy of goal setting is an organization, and its operational definition is a strategy.

The Rubicon model of action phases describes the process of goal realization. This model is a multistep process that begins with individuals' wishes or desires and ends with an evaluation



of the actual outcomes (Seiberling & Kauffeld, 2017). This model allows trainees to both select and realize their goal by first planning the steps necessary for reaching the goal. Later, trainees assess if their goal was achieved successfully. Assisting with setting goals is something that a supervisor can take on. A formal and informal agreement can be made insofar as goals are concerned. Supervisors can discuss with their subordinates their priorities and facilitating a self-evaluation with employees for setting their goals (Govaerts et al., 2017). Many studies dedicated their research to goals and training transfer. One study, by Friedman and Ronen (2015), looked at implementation intent at the end of training. This study found that sales supervisors who discussed how to implement the training to achieve employees' goals had more success than those supervisors who simply repeated to their employees what the goal of the training was (Friedman & Ronen, 2015). This concept is a part of posttraining strategies that further supports this study in that supervisors' creating personal goals can increase training transfer.

Having supervisors show their support via goals and intent on implementing them can also increase training transfer, along the lines of this study. The idea of implementation intent via goal setting as a posttraining strategy in an organizational setting is considered to be a gap in the literature (Schweiger Gallo & Gollwitzer, 2007). The idea is that implementation intent will assist employees in aligning their goals with that of the organization's goals and, therefore, increase training transfer (Baldwin et al., 2009).

Supervisor Support

Supervisor support is defined as the extent to which a supervisor reinforces the use of training programs and what was trained in the workplace (Suleiman et al., 2017). There is evidence in the research that social support and motivation to transfer knowledge are positively related to training transfer. This motivation occurs after team training interventions that include



all team members at both individual and team levels (Massenberg et al., 2015). Social support such as supervisor support, therefore, plays a role in posttraining assistance with training transfer. Supervisors have reported that they have seen shortages on short-term and daily skills that have been transferred over after training. These shortages have been attributed to employees' reverting to old practices and supervisors' not reporting this to managers. Research has shown that supervisors that keep up with their employees and give them clear direction on goals and assistance on how to better use their training bring better job performance and attitude (Suleiman et al., 2017).

Across many studies, supervisor support has been deemed essential for training transfer. There have been studies, however, that report that there is not a positive connection between training transfer and supervisor support (Nijman et al., 2006). However, the majority of the literature agrees that there is, in fact, a correlation between training transfer and supervisor support (Cheng & Hampson, 2008; Chiaburu, Van Dam, & Hutchins, 2010; Foxon, 1997; Kirwan & Birchall, 2006). It also needs to be said that support that comes from the supervisor will increase training transfer if the supervisor's attitude is positive and friendly. The supervisor needs to engage employees in group interactions that facilitate and support organizational goal attainment. The supervisor needs to be on board with the training program. If the supervisor is not on the same page with the training, then encouraging training transfer is difficult (Suleiman et al., 2017). The trainer needs to ensure that training transfer has occurred. The trainer must obtain feedback from not only the employee that was trained but also the supervisor. Getting feedback from the supervisor is something that will assist with the process of what is being transferred posttraining (Diamantidis & Chatzoglou, 2014).



In order for supervisor support to be a successful part of training transfer, organizations need to not only model support to supervisors but also communicate the expectation for supervisor support (Frear, Donsbach, Theilgard, & Shanock, 2018). Supervisor support can be the supervisor's discussing with employees the benefits of what they are going to get trained on as well as the profits of setting goals along with demonstrated interest on the part of the supervisor (Seiberling & Kauffeld, 2017). In a qualitative study by Govaerts et al. (2017), there were 83 different ways identified that a supervisor could show support. The study attributed there being so many different forms of support that described the same thing to there being a lack of recognition or skill from an organization in taking on a more supportive role (Ellinger & Bostrom, 2002). A specific amount spent on training in organizations is set aside for supervisors and those in leadership positions. Twenty percent of a \$34-billion allowance goes to supervisor training. Supervisors understand the importance of setting goals in order to obtain training transfer in the workplace. Training transfer numbers tend to inflate as the method of measuring is self-reports. In an attempt to correct this inflation, supervisors may use the 360-degree assessment. This assessment allows for data to be collected not only from supervisors but also from peers and trainees themselves. A supervisor needs to be able to set direction, create alignment with the goals set and training transfer, and maintain a commitment to the skills and knowledge that were trained (Johnson et al., 2012).

Training transfer is a relationship that is more complicated than just supervisor and employee; the organization is a part of the equation as well. Organizational support theory encompasses this concept. Supervisors that feel that they are supported by the organization tend to have more success by way of supporting their subordinates (Shanock & Eisenberger, 2006). An organization can show support by giving supervisors a voice in important decisions to be



made in the company. Other ways organizations can show support is by simply recognizing supervisors for a job well done and providing them with the resources needed to support their subordinates (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Research has shown that specific things that could be done from a supervisor standpoint to offer support include supervisors' communicating training objectives with their subordinates. Feedback in any form is vital in the training transfer process, and supervisors' providing feedback on the application of the training is something that can accurately be done to aid in the training transfer process. Finally, to increase employee motivation to transfer, supervisors can provide employees with information on the value of the training for their job (Govaerts et al., 2017). Regarding posttraining strategies, supervisors can coach employees on the application of what they were trained on to their job. Supervisors can offer tips and advice on how employees can do their job. These tips can include how they can do their task differently or better. Supervisors can ask subordinates what other support they need in order to be able to transfer what they were trained. Supervisors' posttraining can facilitate the transfer of training by asking subordinates challenging questions on what they were trained on and repeating the training content. Posttraining strategies to facilitate training transfer can also be a time for supervisors to refer their subordinates to a colleague that has mastered the content that they were trained on as an additional coach (Govaerts et al., 2017).

Interpersonal support is a concept that is tied to supervisor support in an effort to increase or decrease training transfer. *Interpersonal support* refers specifically to the attitude taken on by the supervisor. There is a cultural component to how support is perceived. Depending on the cultural background of the employee, what is perceived as support by a subordinate could be perceived as unfavorable by a supervisor. There is a social and psychological climate that must



be open to the encouragement of training transfer. Encouraging climates include helping others, working extra hours, and adding to one's responsibility. Supervisors can also defend the organization and speak on the organization's behalf on important issues within the company. These attitudes and behaviors on the supervisor's behalf are not something that is a part of the job description. This type of support is seen to reduce turnover, which benefits training and training transfer. The decrease in employee turnover allows for the transfer process to take place and to be seen in terms of productivity (Wei Tian, Cordery, & Gamble, 2016).

Level of Experience

Level of experience is the nonbehavioral predictor discussed in this study. Work experience and job performance tend to be linked. Generally, experience categorizes by the number of years the individual has been with an organization or at a particular position. Often, it is not considered that experience can also be categorized by the quality, content, or extent of the experience. With that, job tenure is the clearest indicator of experience. The longer individuals have been in a position, the more job-related knowledge and skill it is assumed they have gained (Y. M. Huang, Chen, & Lai, 2013). Age cannot be confused with work experience. Age can be perceived in several ways: chronological age, the age that individuals see themselves to be, and the perception of others about individuals' age. Other factors determining age include the degree to which employees are compared to each other within their workplace (Cleveland & Shore, 1992). Level of work experience is, therefore, the amount of time that an individual has had. With that, there is the suggestion that the earlier that individuals begin to have work experience, the better off they will be economically speaking. Gaining work experience while in high school, for example, will allow individuals to have a higher productivity level in the future (Baum & Ruhm, 2016).



Level of experience of an employee can affect training transfer. Studies show that level of experience is one of the most critical factors that contribute to the level of competency in the workplace. Level of experience in the workplace for this study is not to be confused with educational levels. Experience ties to reaching goals in an organization (Okamoto et al., 2008). There is research that argues that it does not matter if experience is based on experience in different fields or if firms have educated their employees to build experience; either kind of experience influences the effectiveness of learning transfers (Brauer, Mammen, & Luger, 2017). Employees that are in the service or sales industries are motivated for attrition by push factors like improper work–life balance, poor relations with coworkers, stress at work, and pull factors like better compensations, more exciting work, promotion opportunities, and desire to return to academic studies. The current study focused on those in the sales industry. There appears to be a level of withdrawal when there is a mismatch between an individual's goals and values and those of the individual's organization (Bisht & Singh, 2012). If, for example, individuals' prior experience was negative in any way, it could increase their motivation. Increased motivation due to a negative prior experience can increase attention and receptiveness. This type of motivation can peak before the actual training. One cannot have experience without one's age being a factor. Although this study did not specifically look into age as a factor of training transfer, the concept does go hand in hand. Some studies have referred to age as a factor in training transfer (Bisht & Singh, 2012).

Level of experience can also have a bearing in other forms. One of the Big Five personality traits is openness to experience. This trait is looked at in terms of if a person is open to trying new things or not. Having this trait in a work setting can be a disadvantage if working with a group. If groups have too many people that are open to experiences as a personality trait,



it may become difficult to achieve a common goal. One reason for this could be that those in the group may continuously be coming up with new ideas and, therefore, never follow through with one (Riđić, Ahmić, Riđić, & Bušatlić, 2018). Those that are more prone to be open to experience may not need to rely on level of experience in the industry. Those with a high level of openness to experience tend to be original and receptive to new challenges that may come along in the workplace. Level of openness can at times not be detected in employees that work in a place in which managers have clearly defined parameters and their employees know what is expected of them. It is this kind of working environment that does not require much training for employees. This concept frees up money for the organization to use and focus on such things as their role in the market and production of goods or services (Riđić et al., 2018).

Employees can have one of three things: implicit knowledge, explicit knowledge, or relevant professional experience. Implicit knowledge is something that occurs automatically. Individuals with this may not unconsciously reflect on their learning process. This type of knowledge is a result of experience and is said to affect behavior (George, 2009). Explicit knowledge is an act of learning that takes place on a conscious level; the act is intentional (Rogers, Revesz, & Rebuschat, 2016). Explicit knowledge is objective knowledge that can express itself in a systematic language such as documents, reports, or models. Because explicit knowledge comes in forms of written documents, if employees' expertise is in different areas, it may be difficult for them to comprehend the language (X. Huang, Hsieh, & He, 2014). Relevant professional experience acquires hands-on participation in the workplace. Experience can also be gained through observation of what is needed. The more diverse the experience obtained, the higher the level of employees' competency and confidence (Sayed, Sayed, Iskandar, Saleh, & Jaffar, 2017). When looking at level of experience, burnout, job satisfaction, job expectation, and



retention must also be a consideration. Those with a higher level of experience may experience lower job expectations as a result of burnout. Those that are more experienced tend to have a different work style and attitude than those that are new to the industry (Jacquet & Hermon, 2018). For training transfer to happen successfully, several factors on both an individual as well as an organizational basis must come together.

Synthesis of the Research Findings

The variables in this study, being the specific actions and activities that must take place posttraining to increase the transfer of knowledge, allowed for insight into the theories discussed. Performance cannot be successful without motivation from employees' belief that they will be able to complete the task at hand as well as their having a set goal in mind. Expectancy theory assesses individuals' belief that they can perform at a level that allows them to complete the task; this knowledge motivates them in the task. Goal setting theory allows for employees to have a clear vision of what is expected and, like with expectancy theory, motivates them to positively value the outcome that they believe will be received for their performance (Lambright, 2010). These are vital areas that employers can gauge to determine if employees are motivated to transfer what is learned in training to the workplace. These foundation theories are needed to understand what motivates individuals when in a position to transfer knowledge that they have just been trained.

This study assisted in confirming the importance of goal setting and expectancy theories in training in the workplace related to the field of industrial/organizational psychology. The study expanded the theories by informing something new about application and processes—explicitly, bridging the gap of what is not known with the kind of support at each stage that is beneficial to the training transfer, specifically in the area of posttraining. Research still must be



done on what specific posttraining interventions work best to improve training transfer. This study added to the existing theories by confirming and further expanding by giving particular situational characteristics posttraining that will increase the motivation to transfer knowledge within a goal setting and expectancy theory framework. Goal-setting theory centers on the concept that conscious goals affect action. A weakness seen in research is that perceived expectancy is not a concept that was considered much in studies when speaking of this theory. This concept is important as perceived expectancy is what determines if an individual will take the necessary steps to transfer training. Regarding specific tasks, many connect with reaching goals, and those with higher perceived expectancy will most likely achieve those goals (Barakat & Moussa, 2017).

Expectancy theory posits that motivation increases to the extent that individual experiences enhance expectancy and instrumentality estimates, along with valence for job-related outcomes (Lambright, 2010). Expectancy theory states that an individual's motivation is determined by three things: expectancy, instrumentality, and valence. The theory encompasses the idea of expectation. Individuals must be motivated by the belief that they can perform, with enough effort, to the expectation of their supervisor. *Instrumentality* is the relationship between the individual's performance and the outcome. *Valence*, then, is individuals' motivation to positively value the results that they believe they will receive for their performance. Expectancy theory assesses individuals' belief that they could perform at a level that would allow them to complete the task; this knowledge motivates them in the task. Expectancy theory is observed in virtually all aspects of the employment relationship. Expectancy theory describes employees' tendency to perform their job tasks at a level that is equal to the type of response they expect from the employer. Expectancy theory is manifested in recruitment and selection, interviewing,



and employee performance (Koltko-Rivera, 2006). It was expected that this study would confirm the theory by establishing the importance of supervisor support aids with training transfer as employees are motivated.

Training transfer can be minimal if the training program shows that there are no activities similar to trainees' actual job tasks and duties (Diamantidis & Chatzoglou, 2014). In this situation, the degree of training transfer may be minimal and, regardless of variables used, analyzed as insignificant or not occurring at all. The difficulty of evaluating training transfer, specifically in sales departments, is that sales are what is called a *simple service*. In other words, sales trainees as well as managers find it challenging to objectively evaluate even after training completion (Honeycutt et al., 2015). Another issue with training people in the sales force is that organizations face the choice of training their employees and investing time and money in them. Training employees does not guarantee that the organization's bottom line will be met; what it does guarantee is that there will be an increase in overage costs. Another direction an organization could go is to hire outside salespeople that already trained in what must be transferred. The downside to this option is that short-term goals will be more challenging to meet. Research shows that although it may cost a lot to train employees, there may be a higher price to pay if employees are not trained (Pfeifer & Backes-Gellner, 2018).

A strength in using goal-setting theory when talking about the sales industry is that based on research, this theory is one of the primary practices for effective sales. Some barriers connected to sales forces are lack of setting goals, lack of sales forces' participating in the development of goals, and lack of feedback from supervisors and employees (Morelli & Braganza, 2012). This study, with its focus on goal setting along with supervisor support, addressed these barriers. Something to be considered when applying goal-setting theory is to



ensure that a goal is not set so high or made so complicated that it will encourage unethical behaviors in order to be able to reach the goals. There is a weakness in creating outcome goals on every occasion and making goals too task specific and difficult. Learning goals, when they are challenging, tend to increase unethical behavior and not decrease performance. Setting goals too high may result in poor performance and unethical behaviors, even though research suggests that in order for training transfer to occur successfully, goals must be specific and intricate (Welsh, Bush, Thiel, & Bonner, 2018).

Critique of Previous Research Methods

All related research findings indicate that there is a correlation between supervisor support, proximal and distal goals, and level of experience and training transfer. Each study looked at different combinations of factors. For example, Na-nan et al. (2017) found that motivation to transfer is influenced by workplace environment, and organizational support, supervisor and peer support, and technical support. Their study found that specifically among these factors, organizational support that ranges from rewards and career advancement causes the highest motivation to transfer training. Another study, by Al-Swidi and Al Yahya (2017), focused on gender-related training intentions and work behavior differences. Findings in this study included that the workplace environment had a superior influence on training transfer. This study also found that supervisor support, peer support, and organizational support show signs of a higher motivation to transfer (Al-Swidi & Al Yahya, 2017). Another study, by Mohammed Turab and Casimir (2015), researched employees' attitude towards training transfer. The study showed a positive correlation between expected contributions and association but a nonsignificant correlation with expected reward. Employees' expected contribution and association include the belief that transferring will improve their relationship with others in the



organization. These findings are said to be consistent with other research that is based on attitude and training transfer (Mohammed Turab & Casimir, 2015). The weakness with these studies is that although factors are named and studied, there is an overwhelming number of factors that contribute to training transfer. There is not a set number of factors named and exclusively looked into with the consideration of other factors. Expectancy theory and supervisor support intertwine as employees thrive if they know what the expected outcome is in their department. Regardless of the factor that is researched for training transfer, setting goals is an active part of training transfer. Therefore, goal-setting theory is an essential theoretical framework as it gives vision to what must be transferred.

Some studies focus on the factors that create obstacles for transferring training. A study by Seiberling and Kauffeld (2017) looked at violations to transfer, or distractions and setbacks to employees. It was established that although there may be distractions and setbacks present, the trainer as well as support from employees' supervisors can cultivate motivation and decrease any violations to transfer. This was said to be done because supervisors can give employees alternate ways to achieve a goal through training transfer by emphasizing the compensations of continued goal pursuit. Another study found that something that must be taken into consideration when looking at training transfer is how long individuals take to adapt to change. When individuals go through training, they are taught new skills and a learning curve may take place. The transfer of training may increase over a certain amount of time (Ployhart & Hakel, 1998). There are not many studies that focus on what hinders training transfer; most rather focus on what assists transfer to take place.

Training transfer can be minimal if the training program shows that there are no activities similar to trainees' actual job tasks and duties (Diamantidis & Chatzoglou, 2014). In this



situation, the degree of training transfer will possibly be minimal and, regardless of variables used, could be analyzed as minimal or not occurring at all. The difficulty of evaluating training transfer, specifically in sales, is that sales are what is called a *simple service*. Sales trainees as well as managers find it challenging to objectively evaluate even after training completion (Honeycutt et al., 2015). In such situations, there is a lack of what training specifically looks like and if there is mention of actual training, it is vague in description.

A study by Peters et al. (2014) used the LTSI as the measure in their research. They extracted the questions that pertained explicitly to their study. The LTSI considers 16 factors likely to influence the transfer of training to the workplace (Devos, Dumay, Bonami, Bates, & Holton, 2007). Otherwise, the LTSI includes 68 items that measure general and specific training factors across four transfer scales (Hutchins, Nimon, Bates, & Holton, 2013). Another study that used the LTSI was by Hutchins et al. (2013), in which the inventory was utilized to measure a proximal transfer outcome score on intent to transfer after training. Development of the LSTI identified a select set of factors that have the potential to enhance or hinder training transfer in the workplace. The LTSI is considered to be both a diagnostic and a predictive measure of the transfer of learning (Hutchins et al., 2013). A strength of this study is that it used the LTSI, which has been used many times in research, and its validity and reliability have been tested. The latest version of the LTSI, which this study used, came from 10 years of research around the world, combing data from 6,120 people in 17 countries and 14 different languages (Learning Transfer Solutions, n.d.).

In the quasi-experiment, there is a threat of internal validity in that the difference between the pretest and posttest observations could be due to one or more other factors besides the treatment or intervention. Another threat to internal validity for the quasi-experimental design is



attrition or equivalently experimental mortality, which can be caused when some of the study participants who are observed on the pretest are not observed on the posttest (or vice versa; Reichardt, 2009). In an experimental study design, internal validity could be threatened as the specific intent is to identify cause-and-effect relationships (Leedy & Ormrod, 2016). Quasi-experimental and experimental study designs are procedurally similar in that they both investigate cause and effect and provide surveys to their participants. The designs are procedurally different in that in the quasi-experimental approach, there is a pre survey and post survey with a treatment in the middle, and in the experimental design, there is a treatment and then a post survey.

This study was a quantitative nonexperimental design. The methodology chosen was appropriate because an effect of one or more predictor variables (the use of proximal and distal goals in posttraining strategies, and supervisor support) on a criterion variable (training transfer) and a comparison or control group imply a cause–effect design. A nonexperimental design was the best fit as there was no random assignment of groups. A study conducted by Collins and Cooke (2013) asking if a creative personality is essential to creative performance used multiple regression as its research method. Multiple regression in this study allowed for the variables to be entered one at a time. Regression allows for the control variable to be entered; in the case of this study, training transfer was the criterion variable and in the following stages, the predictor variable and moderator were entered separately with the interaction term after. This showed if the terms of the relationship between the predictor and criterion variables were grounded on interaction terms. A survey for the study was the best method that could be used. There are several reasons that the survey was appropriate in this case. A survey style method is one that is frequently used when researching training transfer. For example, studies by Zumrah (2015),



Bhatti et al. (2013), and Brown and McCracken (2009) all used surveys as a part of their research method when looking at different aspects to training transfer. The survey is a model that has been used for several decades in research. Surveys allow researchers to be able to reach a large sample size for their research in a minimal amount of time (De Haan & Nilsson, 2017).

Summary

The literature review confirmed that there are several factors that can influence training transfer and established the overall responsibilities of roles that supervisors play and the importance of setting goals in order to facilitate training transfer. The theoretical frameworks used for this study were goal-setting theory and expectancy theory. Both theories work together to support the concept of training transfer. Goal-setting theory is centered on conscious goals affecting the action, making the focus of the theory on the core properties of practical goals (Spaan et al., 2016). Expectancy theory addresses an individual's motivation to be the core of the increased training transfer outcome (Lambright, 2010).

Training has been shown to be very costly for companies. An estimated \$356 billion is spent on training without improvement of performance (Beer et al., 2016). To minimize the gap that exists within training transfer, many strategies have been tried. There is a focus on the importance of evaluating pretraining, during training, and posttraining. Training design is something that must be considered as well as giving trainees support at each stage of training. Supervisor support of employees has been deemed as a positive part of facilitating training transfer (Massenberg et al., 2015).

It was noted not to confuse level of experience with age and that there are several factors with level of experience that can hinder training transfer. Research has yet to provide data that give specifics on the role supervisors play in the actual training transfer process posttraining. The



question still remains regarding what specific behaviors are exhibited during posttraining that influence employees to transfer what they were trained. Many studies recommend further research to understand this clearly. Proximal and distal goals are said to be valuable regarding training transfer, but there is still uncertainty about what the specifics and difficulty of goals should be in order to transfer training successfully. Level of experience is a concept that can attribute to training transfer, yet it does not necessarily mean that it is correlated with age. The methodology of the study was the guide on how these questions were addressed. The design of the study was chosen for this task. In the next chapter, the purpose of the study is discussed. Research questions and hypotheses are addressed for this study. The research design, target population and sample, and procedures are highlighted in the upcoming chapter. Data collection and analysis are discussed along with the instrument that was used for the study.



CHAPTER 3. METHODOLOGY

This chapter focuses on the methods and procedures used in this study. The purpose of this study was to determine if a specific combination of variables could influence training transfer. Provided in this chapter are the research questions with their corresponding hypotheses. The research design was a quantitative nonexperimental approach. The target population and sample consisted of adult full-time employees who worked in retail/sales departments. A power analysis was conducted to determine the number needed for the study. Discussions include that of procedures such as participant selection, protection of participants, and data collection. The validity and reliability of the instruments are evaluated in this chapter. Chapter 3 also includes an assessment of ethical considerations for the study to assure that the study did not present a higher than minimal risk to the participants.

Purpose of the Study

The purpose of this study was to identify if a combination of individual variables may be responsible for training transfer. Supervisor support, goal setting, and level of experience as posttraining strategies may increase or affect training transfer. The posttraining strategies intended as the focus of this study include setting goals that are attainable after training (Brown & Warren, 2009). It was hoped that this research would contribute to goal setting and expectancy theories by providing insight and confirming the gap of training transfer. This study can make a contribution to posttraining interventions identified as goal setting; this contribution will allow training to be altered to maximum results. This study may also assist organizations whose employees have experienced substantial changes in their day-to-day jobs in making the changes permanent. Transfer training can assist human resources departments in new procedures, management leadership, jobs and job descriptions, communication models, and human resources



policies (Peters et al., 2014). This research study will serve to encourage research to focus on suitable posttraining transfer intervention models for future development in human resources development research. This study looked at finding conclusive evidence in support of any specific goal-setting strategies that correlate with increased training transfer. The research questions and their correlating hypotheses helped guide the study.

Research Questions and Hypotheses

- RQ1: Do the predictor variables of supervisor support, goal setting, and levels of experience collectively predict outcome scores on the Learning Transfer System Inventory?
 - H₁₀: The predictor variables of supervisor support, goal setting, and level of experience will not collectively predict outcome scores on the Learning Transfer System Inventory.
 - H1_A: The predictor variables of supervisor support, goal setting, and level of experience will collectively predict outcome scores on the Learning Transfer System Inventory.
- RQ2: When all other predictor variables are held constant, will the variable of supervisor support show a significant contribution to the overall regression?
 - H2₀: When all other predictor variables are held constant, the variable of supervisor support will not show a significant contribution to the overall regression.
 - H2_A: When all other predictor variables are held constant, the variable of supervisor support will show a significant contribution to the overall regression.
- RQ3: When all other predictor variables are held constant, will the variable of goal setting show a significant contribution to the overall regression?
 - H3₀: When all other predictor variables are held constant, the variable of goal setting will not show a significant contribution to the overall regression.
 - H3_A: When all other predictor variables are held constant, the variable of goal setting will show a significant contribution to the overall regression.
- RQ4: When all other predictor variables are held constant, will the variable of level of experience show a significant contribution to the overall regression?



- H4₀: When all other predictor variables are held constant, the variable of level of experience will not show a significant contribution to the overall regression.
- H4_A: When all other predictor variables are held constant, the variable of level of experience will show a significant contribution to the overall regression.

Research Design

Quantitative research is research that is measurable in some form, usually with statistical analysis (Antwi, & Hamza, 2015). Quantitative research has particular strengths associated with the methodology. A quantitative method's strengths include conscious distancing by the researcher from the study through systematic development, validation of measures, study design, and statistical hypothesis testing. A quantitative approach lends to the rigor of the attention placed on the explanation and measurements of constructs and representative sampling (Miller, Poole, Seibold, Myers, Park, Monge, Shumate, 2011). Virtually anyone that has the same information would be able to conduct quantitative research that has three sections at its core: the research topic, the research problem, and the research question (Warner, 2013). The goal of this chapter is to provide enough information for anyone to replicate this study. Quantitative research, specifically nonexperimental design, does not have a random assignment, control group, or multiple measures (Trochim, 2020). This study did not have a posttest or comparison group. This study was quasi-experimental because there was only a survey offered after the participants finished their training. There was no pretraining survey, and the study did not assign the participants randomly.

This study was a quantitative nonexperimental design. This type of research method does not manipulate a treatment variable. The predictor variable should have indicated that using a combination of posttraining strategies that use goal setting with supervisor support increases training transfer. For this study, the criterion variable was training transfer, and the predictor



variables were goal setting, supervisor support, and level of experience. By conducting the research using multiple regression, the predictor variables could be investigated in terms of a relationship with the criterion variable. In this study, the Learning Transfer System Inventory (Holton et al., 2000), a validated instrument that is used to measure different factors associated with training transfer, was used to gather information from full-time adult employees in retail/sales departments.

A multiple regression analysis was conducted in this study because it was the best fit allowing for answering the research questions. Multiple regression has been used in psychology and seen a rise in the use of quantitative methods (Plonsky & Ghanbar, 2018). Multiple regression is used when a quantitative indication of a relationship between or among variables is pursued. This study conducted a standard, or simultaneous, multiple regression. Standard multiple regression allows for the predictor variables to be entered all at once into the regression model. This method was chosen because the goal of the study was to show the effects of different predictor variables on a criterion variable, for which a multiple regression allows. A standard multiple regression was also chosen because it would be possible to observe the unique influence of each predictor (in this case, supervisor support, goal setting, and level of experience) variable on the criterion (in this case, training transfer) variable (Plonsky & Ghanbar, 2018).

Figure 1 presents the design for predictor variables predicting training transfer.



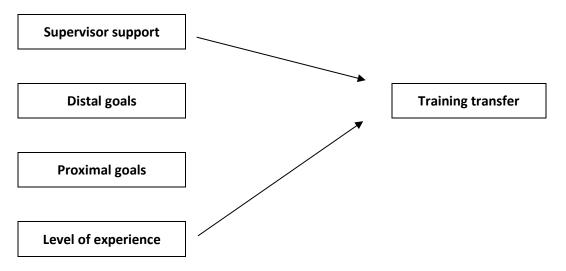


Figure 1. Design for predictor variables predicting training transfer.

Target Population and Sample

The target population for this study included adults in the sales/retail industry working on a full-time basis. The population is limited to within the 50 states of the United States of America. The sample was obtained with purposive sampling, which is discussed. A power analysis was conducted to obtain the number of participants required for the study.

Population

The population for this study was adults, 18 years and older, who were employed full-time in a nonsupervisory role in a sales/retail position and that had participated in training within the last 6 months. The population is limited to within the fifty states of the United States of America. In 2019, the number of full-time employees in the United States was 157.56 million (Duffin, 2020). Plecher indicated in 2019 that the number of full-time employees was set to increase to 158.93 million in 2020. According to the U.S. Department of Labor Bureau of Labor Statistics (2020), 4.6 million of those in the United States worked in retail sales. This number comprises almost 6% of the U.S. population of workers (Takala, 2015). It was found, however,



that the number of retail sales jobs in 2018 reached 4,768,900 (U.S. Department of Labor Bureau Labor Statistics, 2020). The industry outlook from 2018–2028 will decline by 2% (U.S. Department of Labor Bureau of Labor Statistics, 2020). It should be noted that the average hourly wage for a retail salesperson as of May 2018 was \$11.63 (U.S. Department of Labor Bureau of Labor Statistics, 2020).

Sample

Purposive sampling was the sampling method used in this study. Purposive sampling allows for the selection of those affected by a specific issue; for this study, it is training transfer (Valerio et al., 2016). Purposive sampling was chosen for this research because it is one of the most cost-effective and time-effective sampling methods available. It was also the chosen sampling method because it is the most appropriate when there are a limited number of primary data sources that can contribute to the study (Saunders, Lewis, & Thornhill, 2012). Recruitment of participants took place through Qualtrics. Qualtrics was the preferred resource that was used to recruit the participants as well as collect the primary online data. Adequate screening was performed on adult full-time employees for inclusivity in the study; potential participants were asked if they were 18 years of age or over, employed full-time, in a supervisory position, worked in a sales/retail department, and had participated in training within the last 6 months. If individuals held a managerial or supervisory position, were employed on a part-time basis, were under 18 years of age, or had not attended training within the past 6 months, they were excluded from the study. Employee orientation for this study does not constitute training. If potential participants did not meet the criteria, they were excluded from the study and were thanked for their interest.



Power Analysis

The estimated sample size that was needed for this study was 77 participants. The sample size was calculated through the use of G*Power for multiple regression analysis with an effect size of 0.15, an alpha level of .05, and a power of 0.8. G*Power computes the effect size and graphically displays the results generated a sample size of 77 (Faul, Erdfelder, Lang, & Buchner, 2007). The sample size was also calculated by taking 50 + 8(k); in the case of this study, it was 50 + 8(3) = 74 (Warner, 2013). The detailed output for the G*Power for multiple regression analysis done in this study is as follows: effect size f^2 0.15, α error probability 0.05, and power (1 – β error probability) 0.8. The number of tested predictors is 3 and the number of total predictors is 2. G*Power for multiple regression indicated that the non-centrality parameter λ is set to 11.5500000, critical F at 2.7300187, the numerator df at 3, and the denominator df at 73. The actual power for the multiple regression is 0.8017655.

Procedures

The procedures are divided into the following subsections: Participation Selection,
Protection of Participants, Data Collection, Data Analysis, Descriptive Statistics, and Hypothesis
Testing. Participation Selection discusses sampling procedures and the execution of obtaining
recruits for the study. Protection of the Participants deliberates over procedures put in place to
protect the participants of the study. Data Collection addresses the step-by-step process by which
data were obtained from the participants. Data Analysis provides a detailed description of how
data were analyzed in this study. Descriptive Statistics discusses the descriptive statistics used in
this study to describe the research questions and sample. Hypothesis Testing explains the
statistics used to test each hypothesis and the corresponding research question.



Participant Selection

Purposive sampling was the sampling used in the study. Although purposive sampling is used mainly in qualitative research, it was chosen in this quantitative research because participants needed to be knowledgeable about the kind of support, they were offered in the workplace in order to attempt training transfer. Participants needed to have firsthand knowledge of what, if anything, facilitated training transfer in their workplace. The target population for the sample were full-time employees who did not hold a managerial or supervisory position and had participated in training within the past 6 months in the retail/sales industry. They needed to be 18 years old or older for the study. Employee orientation training was excluded as a type of sales training. The following recruitment process was used: Qualtrics screened the target population. Before gaining access to the survey, participants were provided with the opportunity to review the consent form. The informed consent form provided a brief background and purpose of the study and a thank-you for expressing interest in participating in the research. A request to review the informed consent form and contact the researcher with any questions about the content of the consent form was included. Because the form was in an online format, the option I consent was provided for interested participants to proceed with the study and the option I do not consent for uninterested participants was offered to exit out of the survey. Qualified participants were screened based on inclusion and exclusion criteria, population descriptions, and demographic information. Three questions were asked to ensure that participants met the requirements of the study: (a) Do you work in retail/sales? (b) Have you been involved in training with the last 6 months (excluding employee orientation training)? and (c) Do you hold a managerial/supervisory position? If participants met the established criteria for this study, they advanced to the next screen with the survey. If participants answered yes to Questions 1 and 2 and no to Question 3,



they were advanced to the next screen containing the survey. If they answered *no* to Questions 1 and 2 and *yes* to Question 3, they were advanced to the end of the survey and thanked for their interest in the study. With every question in the survey, participants were provided the opportunity to withdraw from the study at any time.

Protection of Participants

Participation in this study was voluntary. The identity of the participants was kept confidential. In the data collected, participants were identified with a unique number that the computer generated on their behalf. The unique number did not pertain to their Social Security number, phone number, driver's license number, or any other preexisting identifying number. Before starting the study, participants had to sign an informed consent form (according to the Institutional Review Board of Capella University) that laid out the study objectives along with contact information for the researcher in case of any additional questions or concerns. Each screen gave participants the option to opt out of the study at any point if they did not want to continue. In 2018, new federal protections of participants in studies were enabled for research with human participants; these protections included informed consent provided to each participant, voluntary participation, and review and approval by an Institutional Review Board before research can begin (Bierer, Barnes, & Lynch, 2017). This particular study abided by these regulations.

Data Collection

Qualtrics was the website that collected data online; they also recruited the participants for this study. If participants decided to become volunteers, consent forms were attached to the beginning of the survey. Responses to the surveys were reported and remained anonymous.

There was not any information that identified the volunteers in any way. It was not the interest of



the study to obtain any personal information. The instrument used to collect data for this study was the Learning Transfer System Inventory (LTSI; Holton et al., 2000). This survey measured if employees applied the knowledge or skills that they have acquired in training to their jobs. The LTSI also measured to see if employees had successfully demonstrated new behaviors or performed new tasks as a result of training and if there had been a change or improvement in their job performance. This particular instrument allowed for valid and reliable measures to improve training transfer. The LTSI provides for assessments of potential issues before a company goes forward with a major training initiative. Current training programs could benefit from follow-up evaluations and investigating known issues with training transfer. The LTSI also allows employers to conduct needs assessments for their training programs that can provide skills needed to transfer for supervisors (Learning Transfer Solutions, n.d.). The average time for completion of the survey was 8 minutes. The desired number of participants was 77; the study generated 90 participants. Once the study ended, the data were downloaded from the Qualtrics website and transported to a Microsoft Excel spreadsheet.

Participation in this study was voluntary. All identifying information from the participants was kept confidential for this study. All participants identified with a number that uniquely identified them as opposed to any information that would identify them, such as a name, Social Security number, or employee identification. Participant data were removed and collected from the survey website, Qualtrics, where it was stored in a secure database using a password-protected document within a password-protected computer. The computer used for this research maintains current security updates. Once the 7-year retention periods end, the data will be permanently and irreversibly destroyed by taking the USB in which the data were stored to a



company that will destroy it. Shred-it is a service provider that specializes in destroying hard drives; this is the company that will be used for this purpose.

Data Analysis

The results obtained from the survey were downloaded from the Qualtrics website and uploaded into a Microsoft Excel spreadsheet then transferred to IBM SPSS version 25.0, a statistical software program, for analysis for this study. SPSS analyzed the data that were collected and created reports with charts, graphs, and tables. The data were examined using a standard multiple regression statistical analysis. This approach was ideal for this study because it enabled examination of the relationship of each predictor variable to the criterion variable. There are many threats to data validity in research, threats that many researchers may not even be aware of or that may not even be in their control to correct. One threat, in particular, is missing values on a survey or survey. This threat occurs when a person completing a survey skips over a question and does not answer it. Warner (2013) described two different ways in which to correct this issue. For a missing value in SPSS, one can leave the corresponding cell blank; this lets SPSS know that the value is missing, and it will not calculate it as a part of the scores of the participants. Another alternative correction to this problem is also through SPSS and involves using different code numbers to represent various types of missing data. To aid with this, SPSS has a missing value add-on for this purpose. With this add-on, SPSS interprets the newly coded numbers; 111 was used for any missing data. As 111 was coded to be a missing value, these scores were included when statistics were calculated. Removing threats to data validity is essential to ensure that the outcome of a study is indeed valid. It is also crucial to disclose how many missing values there are in a data set when reporting findings (Warner, 2013). Reporting



any threats to the data is the ethical road to take. For this study, incomplete surveys were not included in the study.

Descriptive Statistics

For multiple regression, several descriptive statistics were chosen to analyze. The purpose of descriptive statistics is to summarize the data used in a study. The first step in the process of analyzing data is to examine the descriptive statistics (Trochim & Donnelly, 2008). Descriptive statistics embody the characteristics of the variables. The variables are described by way of distribution and central tendency. Analysis of descriptive statistics is intended to define the distributions of the participants' responses to the survey they completed (Trochim & Donnelly, 2008). This action was done by calculating the mean, median, mode, and standard deviation. A Pearson correlation was conducted to measure the strength of the relationship between the variables. These calculations were obtained using IBM SPSS version 25.0. In performing the frequency and distribution analysis, the analysis menu was selected, followed by the descriptive statistics option, then the frequencies option. Once in the frequencies tab, the option for statistics was selected, followed by the options for mean, median, and mode. In the same section, under dispersion, the standard deviation was selected. The output data allowed for some of the various regression assumptions to be analyzed. The results are discussed in Chapter 4. Table 1 provides detailed information on the variables used in this study.



Table 1. Study Variable Data

Variable	Predictor/outcome	Data type
Supervisor support	Predictor	Ordinal
Goal setting	Predictor	Ordinal
Level of experience	Predictor	Nominal
Training transfer	Outcome	Ordinal

Hypothesis Testing

Hypothesis testing was done to test the predictions that were made about this specific study. This study had four research questions and, therefore, four sets of null and alternative hypotheses:

- H₁₀: The predictor variables of supervisor support, goal setting, and levels of experience will not collectively predict outcome scores on the LTSI.
- H1_A: The predictor variables of supervisor support, goal setting, and levels of experience will collectively predict outcome scores on the LTSI.
- H2₀: When all other predictor variables are held constant, the variable of supervisor support will not show a significant contribution to the overall regression.
- H2_A: When all other predictor variables are held constant, the variable of supervisor support will show a significant contribution to the overall regression.
- H3₀: When all other predictor variables are held constant, the variable of goal setting will not show a significant contribution to the overall regression.
- H3_A: When all other predictor variables are held constant, the variable of goal setting will show a significant contribution to the overall regression.
- H4₀: When all other predictor variables are held constant, the variable of level of experience will not show a significant contribution to the overall regression.
- H4_A: When all other predictor variables are held constant, the variable of level of experience will show a significant contribution to the overall regression.



To test the hypotheses, an F-test was planned as it can test to see whether any of the predictor variables in a multiple linear regression model are significant. Before the hypothesis testing, the assumptions in a multiple regression had to be met. Table 2 describes the descriptive and hypothesis testing used in this study. Multiple regression has the assumption of linearity, which means that the criterion variable should have a linear relationship with the predictor variables. Another assumption that must be met is normality, which means that data are normally distributed. Homoscedasticity is an assumption that refers to a criterion variable being equal across all predictor variables. Multicollinearity is the assumption that refers to predictor variables' not being highly correlated with one another. There also is the assumption of normal distribution. There also needs to be the absence of outliers (Laerd Statistics, n.d.; Warner, 2013). To test for these assumptions, IBM SPSS version 25.0 was used. Several steps were taken to analyze the data. In SPSS, the option to analyze was selected, followed by regression and then linear. To assure that the investigation of the data was to the satisfaction of multiple regression analysis, a model fit, R^2 change, descriptive, part and partial correlations, and collinearity diagnostics were performed. Data were initially transferred from Microsoft Excel and coded for SPSS based on the Learning Transfer Inventory scale of answers.



Table 2. Descriptive and Hypothesis Testing

Research Question No.	Type of analysis	Descriptive statistics	Hypothesis testing	Post hoc analysis
1–4	Multiple regression	Pearson correlation	<i>p</i> < .05	Post hoc
		Histogram and scatter plot	Standard method, R^2 , and F -test	Statistical power (optional)
		Mean, median, and standard deviation		

Note. Research Questions 1 through 4 used parallel analysis for evaluation. A post hoc analysis was not conducted for this study.

Instruments

A Likert scale measured supervisor support, goal setting, and level of experience. The survey used for this study was the Learning Transfer System Inventory (LTSI; Holton et al., 2000). The LTSI consists of a 5-point Likert response scale ranging from *strongly agree* to *strongly disagree*. The LTSI measures 16 factors of barriers and catalysts regarding training transfer (Holton & Baldwin, 2003). The LTSI has 48 items divided into two sections. The first section has 34 questions, assesses 11 of the 16 factors, and focuses on the training program itself. The second half has the remaining 17 items that measure five general factors about nonspecific qualities that may affect training transfer (Learning Transfer Solutions, n.d.). Factors of supervisor support include questions about sanctions and performance coaching. The indication of distal and proximal goals was looked at by the element of a personal outcome, positive or negative. Level of experience was coded with a number. Code number 1 indicated that the participant had less than 2 years of experience. Code number 2 indicated that the participant had more than 2 years of experience. A study by Chatterjee, Pereira, and Bates (2018) used the LTSI



to look at training transfer. They found that the survey held exceptional promise regarding its ability to identify barriers to transfer. The survey also provides support for data-driven interventions to address barriers and separate critical factors for evaluating training effectiveness. Permission was granted for this study to the researcher to use the Learning Transfer Inventory. Permission was granted from LTSInventory, which Elwood Holton developed, who led the creation of the LTSI.

Validity

Validity is the degree to which an instrument will measure what it is supposed to measure (Kimberlin & Winterstein, 2008). The LTSI has been validated in 17 different countries worldwide. Because of the numerous validations of the LTSI, it is considered to be the best available method for assessing training transfer in the workplace

(Sørensen, 2017). Multiple studies have validated the LTSI and concluded that the instrument is a comprehensive, valid, empirically based, cross-culturally tested, and diagnostic measure to assess learning transfer (Bates et al., 2012; Chen, Holton, & Bates, 2005; Holton et al., 2000; Khasawneh, Bates, & Holton, 2006). Three studies focused on criterion validity with the LSTI; the studies proposed that environmental factors for interpersonal support tend to be the most potent predictors of individual performance and motivation to transfer (Bates, Holton, & Seyler, 1997; Bates, Holton, Seyler, & Carvalho, 2000; Seyler, Holton, Bates, Burnett, & Carvalho, 1998). Criterion-related validity provides evidence regarding how well scores on a new measure show a relationship with other measures with the same construct or very similar underlying constructs that theoretically should be related (Kimberlin & Winterstein, 2008). The LTSI has had numerous studies that have validated the consistency of the expected 16-factor structure. Posttraining knowledge of retention is an aspect of training transfer that the LTSI has



shown evidence to have the capacity to predict (Bates et al., 2012). A study by Bates et al. (2012) showed that their data supported the validity and the distinctiveness of the factors measured by the LTSI. These findings are consistent with the previous construct validation research done with the LTSI. The LTSI was developed in 1996 by Holton and Bates with the goal that the instrument could look at factors across different training programs, organizations, and employees. Construct validity is judgment based on the accumulation of evidence from numerous studies using a specific measuring instrument. Evaluation of construct validity requires examining the relationship of the measure being evaluated with variables known to be related or theoretically related to the construct measured by the instrument. Based on the literature surrounding the LSTI, there have been many studies on its construct validity, affirming it standard in validity (Kimberlin & Winterstein, 2008). Research on training transfer over the past 2 decades shows many types of instruments and measures used that have had questionable psychometric qualities or provide little evidence that they measure what they are set out to measure (Holton, Bates, Bookter, & Yamkovenko, 2007). According to Holton et al. (2007), it was determined throughout the history of training transfer studies that training transfer is affected by several factors. These factors divide into three sections: trainee characteristics, training design, and work environment.

Reliability

The LTSI is one of the most comprehensive surveys in its validity and reliability regarding training transfer. There have been many studies that have used the LTSI, creating support for its reliability and validity. Numerous journal articles have been published that have used the LTSI instrument (Bates et al., 2012; Bates, Kauffeld, & Holton, 2007; Devos et al., 2007; Hatala & Fleming, 2007; Holton et al., 2007; Velada, Caetano, Bates, & Holton, 2009;



Yaghi, Goodman, Holton, & Bates, 2008; Yamkovenko, Holton, & Bates, 2007). The LTSI was created out of 15 years of research worldwide. The instrument is condensed to its current length based on data from 6,120 people in 17 countries, in 14 different languages. Survey items work across a large span of countries. Some of the languages include Chinese, Malaysian, Farsi, Arabic, Greek, French, and Spanish, to name a few (Learning Transfer Solutions, n.d.).

Internal consistency with reliability allows for an estimate of the equivalence of sets of items from the same test. Internal consistency's coefficient provides an estimate of the reliability of measurement based on the assumption that items measuring the same construct should correlate (Holton, Bates, Bookter, & Yamkovenko, 2007). Holton, Bates, Bookter, and Yamkovenko (2007), conducted test-retest reliability for the LTSI. The coefficient of internal consistency provides an estimate of the reliability of measurement based on the theory that items measuring the same construct should correlate. The most popular method for estimating internal consistency reliability is Cronbach's alpha (Kimberlin & Winterstein, 2008). Reliability coefficients range from 0.00 to 1.00, with higher coefficients indicating higher reliability (Kimberlin & Winterstein, 2008). Personal outcomes and supervisor support were scales taken from the LTSI and had a .87 coefficient for personal outcomes and .91 for supervisor support, indicating a high-reliability rate.

Ethical Considerations

The study did not present a higher than minimal risk to humans physically or psychologically. Concerning respect for persons, ensuring participant anonymity included identifying the participants by a number. There was no identifying information of the participant; for example, age, sex, or name was not asked of the participant. This study only sought nonsupervisory employees, and—therefore—their rank at their job was not requested as it was a



given when participating in the study. This information was included in the consent form that was given to prospective volunteers for the study. The consent form provided the preceding information as well as described the information obtained from the study, how the study would use the data, and how the data were interpreted in the research and all of its intentions (U.S. Department of Health and Human Services, 1979).

An opportunity for participants to opt out of the study was given, in which case the data from that participant was not included in the study. For those that participated in the study in its entirety, instructions consisted of taking the survey via electronic format, including ensuring that the browser participants worked from closed after the survey. Any information collected from individuals who opted out of the study will be kept in a confidential locked safe space for 7 years along with the participants' information. In accordance with the U.S. Department of Health and Human Services (1979), destruction of the data will take place 7 years after the conclusion of the study through a professional third-party shredding company, Shred-it. The data were obtained from the Qualtrics website. Qualtrics has servers with high-end firewall systems for protection. They perform yearly tests for complete penetration of their system. Data that are stored, collected, and retrieved through Qualtrics within a specific location such as North America may be protected with passwords and http referrer checking.

In order for this research to be ethically sound, it was ensured that participants in the study provided informed consent for participation in the research and were advised of their right to privacy. It is essential to make participants aware that seeking informed consent is a part of the research process (Domenech Rodríguez et al., 2014). The nature of the study consisted of a survey and required the participants to self-disclose their information. The questions on the survey included an opt-out option in answering a question. Giving participants the option to



move on from a question without having to answer it circumvents potential ethical concerns of forcing them to answer. Another consideration was to warrant the amount of time that is designated per question and not include burdening and intrusive repeated questions (Walsh & Brinker, 2019).

Summary

This chapter addressed the methodology of this study. This study was a quantitative nonexperimental approach. The purpose of this study was to identify if the combination of certain individual variables may be responsible for training transfer. This chapter contained a statement of the research questions and corresponding hypotheses. The identified research design was a standard multiple regression. The target population was determined to be adults 18 years and older who were employed full-time in a nonsupervisory role in a sales/retail position and that had participated in training within the last 6 months. Sampling for this study was purposive sampling. Obtaining the power analysis for this study was through G*Power. Detailed information regarding participant selection and protection of participants was discussed in this chapter. The collection of data for this study was via the online service, Qualtrics. Assessment of the analyzed data was achieved with the use of SPSS version 25.0, a statistical software program. Discussion of the descriptive statistics and hypothesis testing for the analyzed data was provided in this chapter. The instrument used for this study was the LTSI. The LTSI has been validated in 17 different countries worldwide. Ethical considerations for the study included the determination was that this study did not present a higher than minimal risk to the participants physically or psychologically. The results of the data collected during the research are discussed in the next chapter, Chapter 4.



CHAPTER 4. RESULTS

This study was performed to understand the specific actions that can be taken posttraining to enhance training transfer in the workplace through the perspective of employees. Chapter 4 reviews the data collected and analyzes the relationship between training transfer and supervisor support, goal setting, and levels of experience. Chapter 4 discusses the background of the study, the description of the sample from the data, which used SPSS version 25.0 to analyze data. Included in the description of the sample are tables, scatter plots, histograms, and Pearson correlations. This chapter discusses hypothesis testing for each of the research questions. The chapter concludes with a summary of the data collected; this summary allows discussion of the study implications and recommendations for future research in Chapter 5.

Background

This study took a closer look at posttraining strategies that could be used in conjunction with training transfer in the workplace. Training is an intervention that is most commonly used by human resources departments (Jaidev & Chirayath, 2012). In 2010, it was estimated that \$171.5 billion was spent on human resources development and employee training on an annual basis (Lambright, 2010). That companies report 10% of the invested cost pays off for performance in their organizations is of great interest to the business world (Bates et al., 2012). Chapter 1 determined that there were several concepts on posttraining specifics that still need additional research. For example, research still must be done on what posttraining interventions work best to improve the transfer of training. It is also unclear what variable might have differential influences on learning and performance, such as training transfer (Soderstrom & Bjork, 2015).



Therefore, the research problem was the lack of clarity about which goal-setting interventions are most useful for training transfer—specifically, posttraining. Chapter 1 discussed that this study was a quantitative nonexperimental design. This specific research method does not manipulate a treatment variable. A standard multiple regression is one of the most popular methods for testing interactions in management and applied psychology (O'Boyle et al., 2018). This method was also chosen because it can best answer the research questions and hypotheses postulated in this study. Multiple regression is a procedure that uses values from predictor variables to estimate an individual's score on a quantitative criterion variable (Trunk & Olen, 2016). Training is an intervention that is most commonly used by human resources departments (Jaidev & Chirayath, 2012). In 2010, it was estimated that \$171.5 billion was spent on human resources development and employee training on an annual basis (Lambright, 2010). That companies report 10% of the invested cost pays off for performance in their organizations is of great interest to the business world (Bates et al., 2012).

The theoretical framework of the study was discussed at length in Chapter 2. Goal-setting theory was established as one of the theoretical frameworks of the study. Goal-setting theory centers on the idea that conscious goals have an effect on action. Specific and higher difficulty levels of goals are at the core of goal-setting theory (Dewettinck & Van Dijk, 2013). The other theory discussed in this study is expectancy theory. Expectancy theory states that an individual's motivation determines three things: expectancy, instrumentality, and valence. Expectancy theory manifests itself in recruitment and selection, interviewing, and employee performance (Koltko-Rivera, 2006).

An extensive review was conducted in Chapter 2, looking at training, training transfer, proximal and distal goals, supervisor support, and levels of experience. Training is the key



element in an organization that will assist its employees in staying current in their field, being innovative, and becoming experts in their field (Dostie, 2018). The factors that contribute to training transfer are something that organizations need to be aware of. One of the issues that training transfer has is that participants tend to not always remember what they were trained on (Alshaali et al., 2018). Researchers have estimated that around 40% of training content is transferred immediately after training, 25% of that is retained after 6 months, and 10%–15% is retained after 1 year (Baldwin & Ford, 1988; Wexley & Latham, 2002). In an effort to increase training transfer, goal setting was looked at in this study. Setting goals in a training environment is not a new concept. Setting goals is said to increase training transfer as it assists self-regulatory behaviors such as setting standards, self-monitoring, self-evaluations, and reflections. The gap appears to be when distinguishing which types of goals increase training transfer (Rahyuda et al., 2014).

Supervisor support was another factor that was looked at regarding training transfer. Supervisor support is defined as the extent to which a supervisor reinforces the use of training programs and what was trained on in the program (Suleiman et al., 2017). Supervisors have reported a shortage of skills transferred over after training with daily skills and in the short term. One of many factors that can contribute to this is employees' reverting to old practices and it not being reported to management (Suleiman et al., 2017). Level of experience was another factor that was considered in this study regarding training transfer. It was the nonbehavioral factor in this study. Chapter 2 made it clear not to confuse age with level of experience. Level of work experience refers to the amount of time that an individual has had practicing a specific skill (Baum & Ruhm, 2016). Studies have shown that level of experience is one of the most critical



factors that can contribute to the level of competency in the workplace. Level of experience is also tied to reaching goals in an organization (Okamoto et al., 2008).

Chapter 3 discussed the purpose and methodology behind the study. The purpose of the study was to identify if a combination of individual variables may be responsible for training transfer. This study was conducted with a survey, the Learning Transfer System Inventory (Holton et al., 2000). The survey was provided to participants via the online platform, Qualtrics. The target population for this study was adults in the sales/retail industry working on a full-time basis with a nonsupervisory or managerial role. The data were analyzed using IBM SPSS version 25.0 once imported from Microsoft Excel. The data were analyzed using a standard multiple regression. The Learning Transfer System Inventory measured if employees applied the knowledge or skills that they have acquired in training to their jobs. The remainder of this chapter is dedicated to the presentation of the data analysis.

Description of the Sample

Participants for this study were recruited via the online platform, Qualtrics. All participants volunteered. They were screened with questions pertaining to eligibility to participate in the study and signed a consent form prior to gaining access to the survey. Participants were all adults 18 years old and over and employed full-time in the sales/retail industry. Those that participated have to have taken part in a training that was not an employee orientation within the past 6 months. Participants were excluded from the study if they held a supervisor or managerial role. The estimated sample size for this study was 77. A total of 90 participants were sampled. All of the surveys were completed in their entirety and all consented to participating. Table 3 represents the level of experience that each participant had during the



time the data were collected. No further personal information or demographic information was gathered from the participants.

Table 3. Participant Level of Experience

Level of experience	n
Less than 2 years	38
More than 2 years	52
Total	90

Hypothesis Testing

Hypothesis testing was conducted to determine if there was a predictive relationship between the predictor variables and the criterion variable. First, there was verification that the assumptions of a multiple regression were met. Second, a standard multiple regression analysis was conducted in order to understand the variation of the predictor variables with the criterion variable. This regression was also done for the prediction of the predictor variables based on the values of the criterion variable.

Summary of Hypothesis Testing

A multiple regression analysis consists of six assumptions that have to be met. The assumptions include the assumption of independence of observation, linearity, homoscedasticity, multicollinearity, no significant outliers, and normal distribution (Laerd Statistics, n.d.; Warner, 2013). The assumption of independence of observation was tested using the Durbin–Watson test. The Durbin–Watson statistic for this analysis is 1.612 (as shown in Table 4). The range of the Durbin–Watson should be between 0 and 2. A value close to 2 indicates that there is no



correlation between residuals. For this study, there was independence of residuals, as assessed by a Durbin–Watson statistic of 1.612 (Laerd Statistics, n.d.).

Table 4. Model Summary

R	R^2	Adjusted R^2	Standard error of the estimate	Durbin-Watson test
.358	.128	.087	.912	1.612

The second assumption that was tested was linearity. This was done by completing a scatter plot. Figures 2 through 5 show the assumption of linearity being met by visual inspection of the partial regression plots between the dependent variable and each independent variable. Figure 2 shows a linear relationship between the willingness to transfer and supervisor support (assistance posttraining).

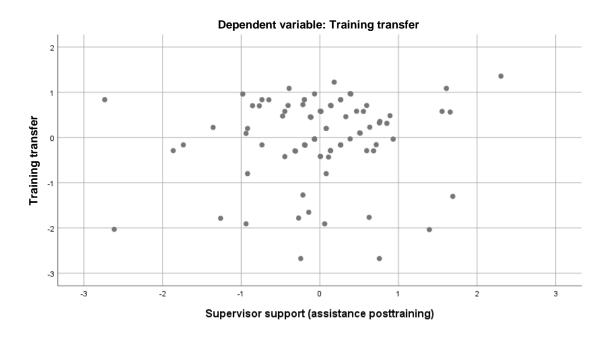


Figure 2. Assumption of linearity partial regression: Supervisor support (assistance posttraining).



Figure 3 shows a linear relationship between the willingness to transfer and supervisor support assistance (helping applying training).

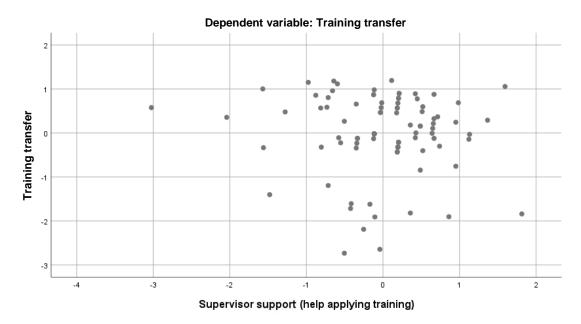
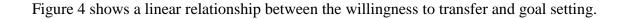


Figure 3. Assumption of linearity partial regression: Supervisor support (help applying training).



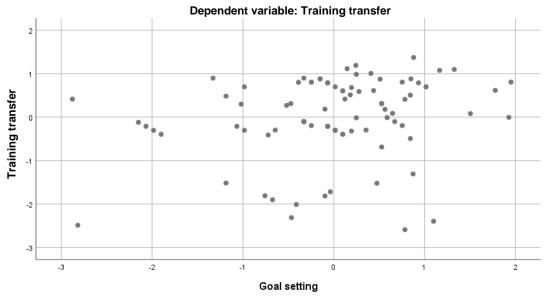


Figure 4. Assumption of linearity partial regression: Goal setting.



Figure 5 shows a linear relationship between the willingness to transfer and level of experience.

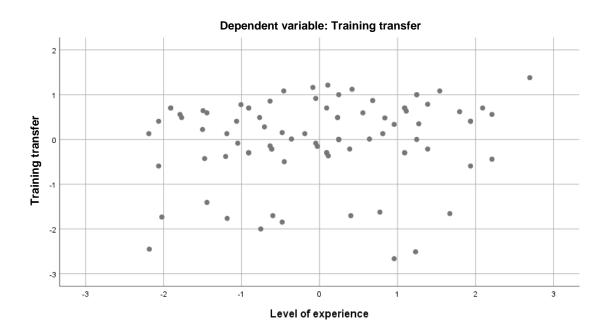


Figure 5. Assumption of linearity partial regression: Level of experience.

The third assumption, homoscedasticity, was tested by plotting the studentized residuals against the unstandardized predicted values. The scatter plot does show a trend, but it does not violate the assumption of homoscedasticity. This study had more than 40 participants and did not have skew or kurtosis between 2 and -2; therefore, this is not considered a violation. The dependent variable is normally distributed; there is no violation (Laerd Statistics, n.d.).



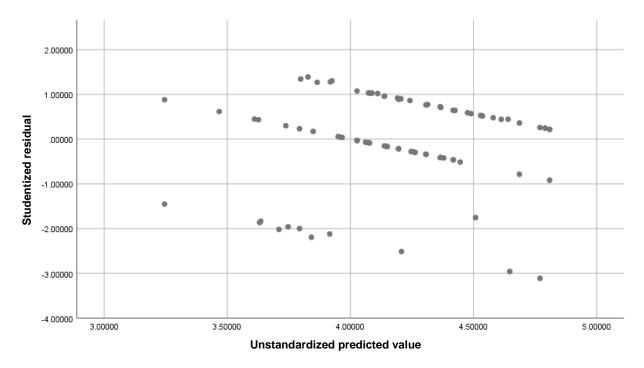


Figure 6. Assumption of homoscedasticity.

The fourth assumption that was tested was for multicollinearity. Table 5 shows that no two predictor variables has a correlation above 0.9 or below 0.9. This result is established with the variance inflation factor value. A variance inflation factor value above 10 indicates that there is an issue with collinearity. The variance inflation factor value for each independent variable in this study ranges from 1.054 to 1.878. This study did not show evidence of multicollinearity (Laerd Statistics, n.d.).



Table 5. Correlations

				80% confidence					
			Int	erval for	В	Correl	ations	Collinearity statistics	
Predictor variables	T	Sig	Lower	Upper bound	Zero- order	Partial	Part	Tolerance	Variance inflation factor
(Constant)	6.583	.000	2.294	3.414					
Supervisor support (assistance posttraining)	561	576	237	.094	.166	061	057	.548	1.824
Supervisor support (help applying training)	1.040	.301	030	.275	.257	.112	.105	.533	1.878
Goal setting	2.184	.032	.094	.365	.301	.231	.221	.686	1.458
Level of experience	1.375	.173	.007	.215	.165	.148	.139	.949	1.054

The fifth assumption tested was no significant outliers. A Q–Q plot was conducted to determine if there were any outliers. Figure 7 shows a visual confirmation that there are no significant outliers in this study, with a set standard deviation between 3 and -3.



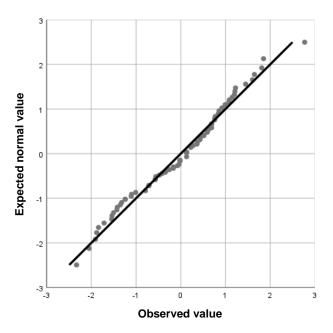


Figure 7. Significant outliers.

The final assumption that was tested was normality. Figure 8 shows that the distribution was within a normal range of a symmetric distribution.

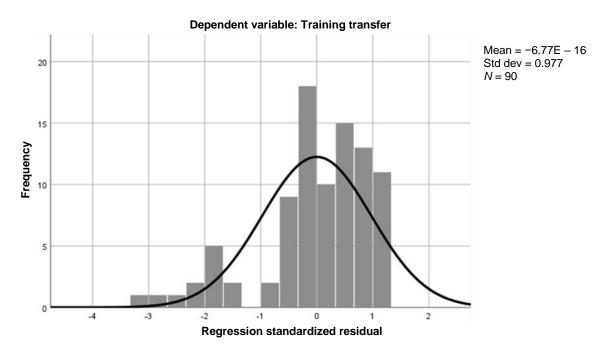


Figure 8. Assumption of normality distribution.



The descriptive statistics for each variable in this study are in Table 6. As presented in Table 6, the descriptive statistics for this model show that the normality of distribution has been met with the skewness and kurtosis of the model. There is, however, an outlier present that does not stay within 3 and −3. Table 7 shows the outlier. The outlier was kept in order to consider all the measures. The leverage values of the data set were inspected. The highest value indicated was .20169. A range from 0.2 is considered to be safe, a range from 0.2 to 0.5 is considered to be risky, and anything above 0.5 is dangerous (Huber, 1981). Influential points were then checked with Cook's distance values and the highest number was .17432; as this number is not above 1, it is not considered to be influential (Laerd Statistics, n.d.).

Table 6. Descriptive Statistics

Variable	Mean	SD	Skewness	SE	Kurtosis	SE
Training transfer (constant)	3.78	.909	367	.254	593	.503
Supervisor support (assistance posttraining)	3.47	1.124	668	.254	188	.503
Supervisor support (help applying training)	3.48	1.019	687	.254	.179	.503
Goal setting	3.66	1.113	677	.254	091	.503

Table 7. Casewise Diagnostics

Case number	Std. residual	Training transfer	Predicted value	Residual
64	-3.036	2	4.77	-2.077

A standard multiple regression was used to predict supervisor support, goal setting, and level of experience from training transfer. Table 8 shows the significance of the predictor variable.



Table 8. Multiple Regression Analysis

Variable	В	SE_{β}	β
Training transfer (constant)	2.854	.434	
Supervisor support (questions)	072	.128	077^{*}
Supervisor support (help applying training)	.123	.118	144*
Goal setting	.229	.105	.267*
Level of experience	.111	.081	.143

Note. B = unstandardized regression coefficient, $SE_{\beta} = \text{standard error of the coefficient}$, $\beta = \text{standard coefficient}$. *p < .05.

Table 9 shows the predictor analysis for this model. R^2 for the overall model was 12.8% with an adjusted R^2 of 8.7%, a small size effect, according to Cohen (1988). The R^2 value shows that only 12.8% of the change of the criterion variable can be predicted by a combination of the predictor variables (supervisor support, setting goals, and level of experience).

Table 9. Predictor Analysis

R	R^2	Adjusted R^2	Std error of the estimate	Durbin-Watson
.358	.128	.087	.912	1.612

The standard multiple regression model shows statistical significance of the predictor variables on training transfer, F(4, 85) = 3.130, p < .05, adj. $R^2 = .087$, as shown in Table 10.



Table 10. Goodness of Fit Model

Model	Sum of squares	df	Mean square	F	Sig.
Regression	10.419	4	2.605	3.130	.019
Residual	70.737	85	.832		
Total	81.156	89			

One of the three variables showed statistically significant to the prediction p < .05, as shown in Table 11. A post hoc analysis was not conducted as the researcher looked at the results with a more holistic lens in terms of the interpretation of the significance tests associated with the individual coefficients. In this case, the researcher was interested in the results as they were and was not motivated by producing only positive results.

Table 11. Summary of Hypothesis Outcomes

Null hypothesis	Significance	Outcome
1. The predictor variables of supervisor support, goal setting, and levels of experience will not collectively predict outcome scores on the Learning Transfer System Inventory.	<i>p</i> < .05	Null rejected
2. When all other predictor variables are held constant, the variable of supervisor support will not show a significant contribution to the overall regression.	<i>p</i> > .05	Failed to reject null
3. When all other predictor variables are held constant, the variable of goal setting will not show a significant contribution to the overall regression.	<i>p</i> < .05	Null rejected
4. When all other predictor variables are held constant, the variable of level of experience will not show a significant contribution to the overall regression.	<i>p</i> > .05	Failed to reject null



Summary

Multiple regression was run to predict training transfer in the workplace from supervisor support, goal setting, and level of experience. There was linearity that was assessed by partial regression plots, in addition to a plot of studentized residuals counter to the predicted values. There was the independence of residuals, which was assessed by a Durbin–Watson statistic of 1.612. There was a visual inspection of a plot of studentized residuals versus unstandardized predicted values, and there was homoscedasticity. No evidence of multicollinearity was present, as assessed by tolerance values greater than 0.1. There was one studentized residual greater than ± 3 standard deviations that was not deleted. The studentized residual was kept in order to consider all the data. Upon inspection of the outlier, there were no leverage values greater than 0.2 and values for Cook's distance above 1. The normality assumption was met, assessed by a Q–Q plot. The multiple regression model statistically significantly predicted training transfer, F(4, 85) = 3.130, p < .0005, adj. R2 = .087. The null hypotheses were rejected for Hypotheses 1 and 3. The study failed to reject the null hypotheses for Hypotheses 2 and 4.

Chapter 5 goes into detail of the summary and discussion of the study results, and conclusion based on the results. Chapter 5 also addresses the limitations of the study, implications for practice, and recommendations for further research.



CHAPTER 5. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

A standard multiple regression was conducted for this study. The data and interpretation are discussed in this chapter. The following chapter summarizes the results of the study and provides an in-depth discussion of the results and conclusions based on the results of the study. This chapter discusses the limitations of the study and implications for practice. The chapter ends with recommendations for future research in this area, along with the conclusion of this study.

Summary of the Results

Research shows that upper management reports that their sales training does not have a meaningful impact on sales figures overall (Tan & Newman, 2013). The general identified problem was that employees are not transferring what they have been trained on to their workplace at high rates. The specific gap in the literature is what specific factors help the training transfer process. This study took a look at this issue through the perspective of the employee and not the supervisor's or managers. This study contained the following four research questions to see what combination of variables could have a possible impact on training transfer:

- 1. Do the predictor variables of supervisor support, goal setting, and levels of experience collectively predict outcome scores on the Learning Transfer System Inventory?
- 2. When all other variables are held constant, will the variable of supervisor support show a significant contribution to the overall regression?
- 3. When all other variables are held constant, will the variable of goal setting show a significant contribution to the overall regression?
- 4. When all other variables are held constant, will the variable of level of experience show a significant contribution to the overall regression?

This study is significant as it attempted to add value to the present literature on training transfer. This study looked at the gap in the literature, regarding which Bhatti et al. (2013) indicated researchers need to differentiate between the kinds of support given to trainees at every



stage. This study specifically studied posttraining strategies. The posttraining strategies taken into consideration were supervisor support, goal setting, and level of experience. *Supervisor support* was defined as the extent to which a supervisor reinforces the use of training programs in the workplace (Suleiman et at., 2017). Goal setting is said to increase training transfer (Rahyuda et al., 2014). Level of experience was the nonbehavioral predictor in this study and has been found to be one of the most critical factors that contribute to the level of competency in the workplace (Okamoto et al., 2008). Literature shows that what is missing from research on training transfer is the specifics of what would benefit training transfer. Training transfer is a central issue in human resources development (Burke & Hutchins, 2007). Research has found that approximately 40% of training content is transferred immediately after training, 25% of that is retained after 6 months, and 10%–15% is retained after 1 year (Baldwin & Ford, 1988; Wexley & Latham, 2002). This study focused on those who had participated in a sales training within the past 6 months. What was not known is wherein the 6-month spectrum the participants took the training.

The methodology used for this study was quantitative nonexperimental. Participants anonymously answered on the Learning Transfer System Inventory (Holton et al., 2000). The inventory was analyzed using a standard multiple regression. Multiple regression was used because it allows for the predictor variables to be entered all at once into the regression model. This method was ideal for the study because the goal of the study was to show the effects of predictor variables on a criterion variable. A standard multiple regression was utilized as it made it possible to observe the unique influences of each predictor (in this case, supervisor support, goal setting, and level of experience) variable on the criterion (in this case, training transfer) variable (Plonsky & Ghanbar, 2018). The multiple regression model showed a statistically



significant training transfer (see Table 11), F(4, 85) = 3.130, p < .0005, adj. $R^2 = .087$. Interpretation of the results follows in the next section.

Discussion of the Results

With all of the research surrounding training transfer and the research questions that were postulated, the results were not what were expected and created more questions than answers. The expectation was that all of the research questions would be statistically significant. The null was rejected for the first research question. Therefore, the predictor variables of supervisor support, goal setting, and levels of experience collectively predicted the outcome scores in the Learning Transfer System Inventory. The study showed that there was enough evidence to conclude that the effects exist. The study failed to reject the null for the second research question; therefore, it found that when all other predictor variables were held constant, the supervisor support variable did not show a significant contribution to the overall regression. The null was rejected for the third research question, when all other predictor variables were held constant, as the variable of goal setting showed a significant contribution to the overall regression. The fourth and final research question failed to reject the null; thus, when all other predictor variables were held constant, the variables of the level of experience did not show a significant contribution to the overall regression. However, there is research that supports the idea that it does not matter if experience from different fields and that regardless of where it comes from, experience influences the effectiveness of training transfer (Brauer et al., 2017).

Supervisors' assisting their employees regularly in working on problems they may have trying to use their training failed to reject the null, and for this study, it was statistically significant. The same goes for the supervisor support predictor, when supervisors help their employees by discussing ways that they may apply what they have learned in training to the



workplace. The level of experience in this study was not statistically significant, as shown in Table 3. Supervisors' helping employees on how to apply their training to their job was statistically significant, as indicated in Table 5. Although the result was significant, it was surprising as it was a smaller percentage than it was thought it would be based on the literature. Studies show evidence that supervisor support is essential for training transfer and most of the literature states that there is a correlation between training transfer and supervisor support (Cheng & Hampson, 2008; Chiaburu et al., 2010; Foxon, 1997; Kirwan & Birchall, 2006). The result of this study could be attributed to shortages of short-term and daily skills that have been seen by supervisors as diminishing after training. Some reasons could be linked to employees' reverting to old practices and supervisors' not reporting this to their managers.

The level of experience was the nonbehavioral predictor in this study. The longer a person has been in a position, the more job-related knowledge and skill they are assumed to have (Y. M. Huang et al., 2013). Those that participated in this study were divided with the level of experience. Of the 90 participants, 38 had less than 2 years' experience in sales and 52 had more than 2 years' experience in sales. The results could be contributed to training that introduces a new way of doing things, in which case level of experience would have no bearing on training transfer. The level of experience was not statistically significant in this study. In order for training transfer to happen successfully, several factors both on an individual and organizational basis must come together. Level of experience may not be a factor to individuals that have one of the Big Five personality traits, such as those that are open to experiences and do not need to rely on experience alone (Riđić, Ahmić, Riđić, & Bušatlić, 2018). Although the results were not what were expected from the study as a whole, the conclusions to the study are definite and, despite being contradictory to the literature, make for a valid contribution.



Conclusions Based on the Results

This section provides a conceptualization of the results of this study in light of findings from previous studies. A comparison of the findings is made in conjunction with the theoretical frameworks used in the study. The findings are also discussed with previous literature. The section explores the interpretation of the findings of this study.

Comparison of the Findings With the Theoretical Framework and Previous Literature

This study was looked at through two theoretical frameworks: goal setting and expectancy. According to organizational behaviorists, of 73 organizational behavior theories, goal-setting theory is one of the essential theories (Neubert & Dyck, 2016). Through the lens of goal-setting theory, setting goals has been found to positively affect performance (Dewettinck & Van Dijk, 2013). Baumann and Bonner (2017) disclosed that posttraining can tie into organizational goals and assist with clearly set goals needed to attain the transfer of knowledge. Expectancy theory is tied to feedback at work. Feedback is essential on the employee level as well as supervisor level (Koltko-Rivera, 2006). This study looked at training transfer from the perspective of the employee and not the supervisor. These results may have assisted in the confirmation of the gap in the literature that feedback from all levels creates a better rounded perspective that can be ideal in closing the gap in training transfer. If in fact the results are indicative that there is no feedback on the part of the employee to the supervisor or vice versa, this could be a factor to continue to look into.

Interpretation of the Findings

Overall, this study showed that the combination of predictor variables goal setting, supervisor support, and level of experience did collectively predict the outcome of training transfer in the workplace. Although goal setting and supervisor support appeared to have been



said to have a significant influence on training transfer, it is unclear which specific actions in goal setting and supervisor support work best. This does not mean that organizations should dismiss the benefits that training can have on their companies. The reality is that training transfer has not been completely figured out yet. Whereas training transfer continues to cost billions in human resources development and employee training annually (Lambright, 2010), it is of the utmost importance that organizations and their leaders continually seek out potential strategies to improve training transfer.

If, as the results of this study indicate, goal setting, supervisor support, and level of experience collectively have a significant influence on training transfer, it should not mean that organizations should not look to other combinations of variables to improve training transfer. Other strategies such as feedback, evaluations, and peer support may be more effective in increasing training transfer in sales. Employees may transfer training based on how committed they are to the training and the organization. If employees do not feel committed to their role in sales, it could affect how likely they are to commit to transferring what they have trained on to their role. It is also possible that employees' training transfer intentions are related to the training context not having anything to do with their specific charge; in such cases, transfer cannot be completed (Curado et al., 2015). Also, employees may not feel comfortable approaching their supervisors to ask for help in the transfer process, and supervisors may not be actively engaging with their subordinates to assist with issues posttraining.

Limitations

This study had several limitations that could have affected its outcome. The first limitation was the use of a self-administered and self-evaluated survey. Because the study focused on posttraining strategies, there was no information collected pretraining or during the



training. Using a self-administered survey could have caused biases and exaggerations by the subjects regarding training transfer. Another possible limitation was that subjects sought after for this study were from different organizations, and there was no focus on one organization and how they may or may not be doing things for training. There was no way of knowing if training was done in a traditional face-to-face setting or virtually. Participants were asked if they had participated in training within the last 6 months. Nevertheless, the specific length of time since they had had their training was not asked, and this information could have been a valuable in looking at results. The nonexperimental design of this study did not lend itself to consider causal inferences. With these limitations, this study adds unique training transfer predictors to the existing current literature.

Regressions are often associated with type II errors; they are also prone to reporting bias, resulting in elevated type I errors (O'Boyle et al., 2018). There are times that multiple regression analysis is not sufficient for understanding if there is, in fact, significance in the data. If looking for statistical significance with interactions, as in this study, it may be beneficial to test the specific form of the interaction. The difficulty of evaluating training transfer, specifically in sales, is that sales are what is called a *simple service*. In other words, sales trainees and managers find it challenging to objectively evaluate even after training completion (Honeycutt et al., 2015). Not conducting a post hoc analysis for this study may have been a limitation. A post hoc analysis could have found if there was a significant difference between variables and negate a possible type I error.

Implications for Practice

The expected practical significance of this study was that it would show the benefits of combining goal setting, supervisor support, and level of experience with posttraining strategies



and increase training transfer when implemented. The practical implications of this study based on its results could span across all organizational training models and assist in showing the benefits of combining goal setting in posttraining strategies in training transfer. This study does not suggest that a posttraining strategy alone is the solution to the problem of training transfer, but it did show that a posttraining strategy can assist in bridging the gap. The results did not provide evidence that supervisor support and level of experience had a significant relationship with training transfer. This does not mean that supervisor support and level of experience are not a critical part of posttraining strategies. The population studied was working adults, specifically in the retail and sales departments; this study affects employees at not only the nonmanagement level but also the management level and the organization as a whole. Researching what is not known, such as the specific kind of support that is helpful at the posttraining stage, would be beneficial to possible training transfer. This research addresses what posttraining interventions could work best to improve the transfer of knowledge from training (Bhatti et al., 2013). The results of this study can assist the training process in its entirety for a well-rounded, full experience that is catered to the transfer of knowledge after training.

This study can allow practitioners to develop better training programs that will be conducive to employee transfer of knowledge after training. The research contributes and confirms goal setting and expectancy theories as frameworks for studies contributing to training transfer. This study expands on the theories by telling organizations something new about application or processes explicitly; bridging the gap of what is not known with the kind of support at each stage would be beneficial to the transfer of knowledge, specifically in the area of posttraining. This study aspires to improve the training experience by illustrating the benefits of specific posttraining activities that will increase the transfer of knowledge.



This research adds to the existing literature on the topic by bridging the gap by addressing an issue cited in Kennedy et al. (2014) that posttraining evaluations for Steps 3 and 4 for Kirkpatrick's assessments (behavior and results) are typically not completed. The study indicates these steps were not completed because the managers in the study did not fully understand the evaluation methodology and how measurements were to be read. Some other reasons that were listed in the study were the beliefs that postevaluations were not useful for the organization and that the data were not standardized enough to be able to be compared to other functions. Many changes take place regarding training that are not communicated to the training manager until it is time to train, when there is little to no time to absorb or prepare for the new information. Studies propose that researchers should distinguish the types of support that trainees need at each stage of training like pretraining, during training, and posttraining. Most importantly, at the time of developing a scale, researchers should focus on and differentiate the kinds of support that trainees need before, during, and after training (Bhatti et al., 2013). If organizations do not ensure that a trainee is transferring training back to the job, then the training is wasteful to not only the trainee but also the organization for which the trainee is expected to work (Heilmann et al., 2013).

Human resources departments could use the information from this study when developing training for their staff. The importance of training transfer should not be overlooked. Human resources departments may perhaps arrange organizational competencies, which are those that are rooted in an organizational system and structures that tend to exist within the organization, even when employees have left the organization (Potnuru & Sahoo, 2016).

Organizational competencies could contain training to include posttraining strategies that are focused on the combination of goal setting, supervisor support, and level of experience. The



goal attainment approach is one of the critical procedures for the measurement of organizational effectiveness. The goal attainment approach holds that an organization is useful when it accomplishes its stated goals. This process is applicable only when the organization has a clear set of time-bounded and measurable goals and objectives (Potnuru & Sahoo, 2016). This study could shed light on organizational effectiveness by including goal setting, supervisor support, and level of experience as posttraining strategies to consider.

Recommendations for Further Research

Each study contributes to the existing literature having to do with training transfer, and the absence of support from this study increases questions to be asked in the future. Researchers can provide better empirical evidence to support which specific posttraining strategies work best for successful training transfer. Other approaches to the investigation, such as using a qualitative method instead of a quantitative one by way of interviews, could shed some light on which specific combinations of strategies work best for employees. Interviews would give the subject a much better understanding of what is working and is not working with how training and support are conducted. This method could aid in the identification of the unique behavior that happens naturally in a workplace setting. An interview could also bring to light unaddressed interrelated variables.

It may be beneficial to study one particular organization as opposed to one specific department in various organizations. Although this might appear as a limitation, it would allow for exploration to transfer from the perspective of the individual program, departmental, subunit, and organization (Ford & Weissbein, 1997). Encompassing all areas of the organization would allow for a better understanding of the influence of the organizational culture and relationships on training transfer (Muduli & Raval, 2018). This influence could result in finding if employees



feel comfortable and in a safe environment to approach their supervisor with questions and concerns about transferring what was trained. Motivation to transfer is a construct that could be researched to see if, in fact, it changes over time, which can cause transfer to be a challenge (J. L. Huang, Ford, & Ryan, 2017).

The strong correlation between goal setting and training transfer can lead researchers to question if the employee or organization sets the goal, as well as look into what timeline was given for the employee to reach the goal and if it was a long-term goal broken up into several smaller goals. Feedback, which researchers can focus on as both formal by way of performance appraisal and informal by way of peer-to-peer assistance, can help in making an employee aware of performance levels as they relate to set goals (Hughes, Zajac, Spencer, & Salas, 2018).

Conclusion

The goal of this study, as it is for all studies, was to gain answers. A standard multiple regression was utilized as it made it possible to observe the unique influences of each predictor (supervisor support, goal setting, and level of experience) variable on the criterion (training transfer) variable. The current study found that collectively, goal setting, supervisor support, and level of experience could not predict training transfer in the workplace. It was found, however, that goal setting does show to have a significant relationship with training transfer. Supervisor support as well as level of experience did not show to have a significant relationship with training transfer. Although the results of this study indicate that a combination of strategies used did not appear to increase training transfer, the findings did provide one of the strategies, which was goal setting posttraining, did contribute to training transfer.

The practical implications of the results of this study could impact organizational training models. The implications assist in showing the benefits of combining goal setting in posttraining



strategies in training transfer. This study does not suggest that a posttraining strategy alone is the solution to the training transfer problem, but posttraining does assist in bridging the gap.

Although these specific factors may not have shown to be the most effective regarding training transfer in sales, leaders of these organizations must continuously seek out potential combinations of strategies that will assist with training transfer. Findings from this research indicate that further research is needed to understand better the factors that contribute to training transfer in the sales industry and how to address those factors as they pertain to training transfer.



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